

1-1984

University Catalog 1984-1986

University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©1984 University of Northern Iowa

Follow this and additional works at: https://scholarworks.uni.edu/uni_catalogs



Part of the [Higher Education Commons](#)

Recommended Citation

University of Northern Iowa, "University Catalog 1984-1986" (1984). *UNI Programs and Courses Catalogs*. 20.

https://scholarworks.uni.edu/uni_catalogs/20

This Book is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in UNI Programs and Courses Catalogs by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

University of Northern Iowa

1984-1986 Bulletin — Catalog Issue



University of Northern Iowa Bulletin

University Catalog

1984-1986



Effective Spring Semester — 1984

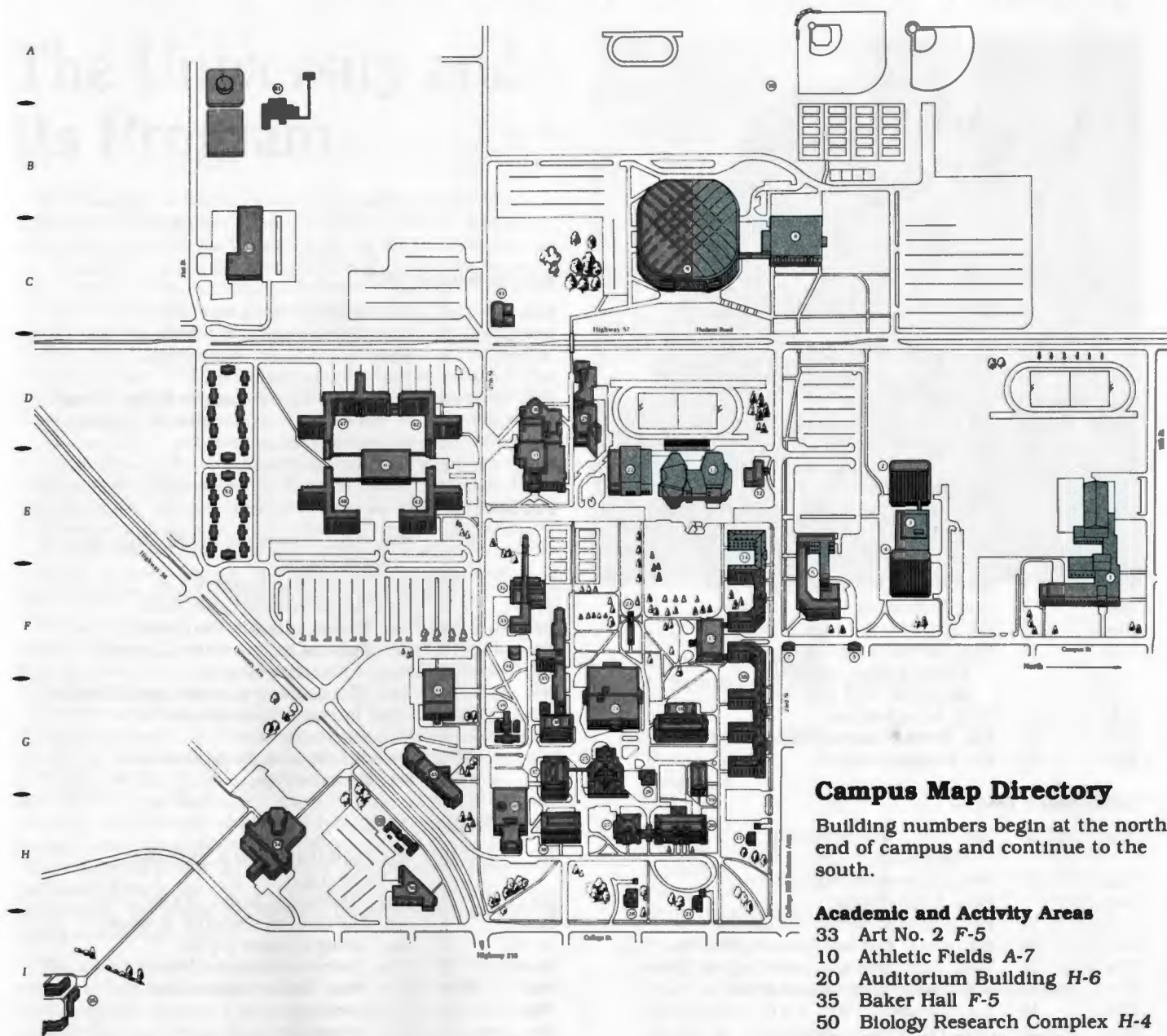
UNIVERSITY OF NORTHERN IOWA BULLETIN. Issued four times a year by the University of Northern Iowa, 1222 West 27th Street, Cedar Falls, Iowa 50614, during the months of January, February, March, and October. Second-class postage paid at Cedar Falls, Iowa 50613. Postal number USPS 121-380.

Vol. LXXXV, No. 1, January 1984

Contents

University Map	3
University Calendar	4
The University and Its Program	5
College of Education	6
College of Humanities and Fine Arts	7
College of Natural Sciences	8
College of Social and Behavioral Sciences	8
School of Business	8
General Information	9
Student Housing	9
Student Services	9
Financial Aids and Student Employment	11
Student Activities and Honors	13
University Facilities and Educational Services	15
University Policies	23
Admission Procedures	23
Preparation for Admission	24
Admission Standards	25
Transfer Students	26
Graduate Admission	27
Resident-Nonresident Student Classification	27
Requirements for Graduation	29
Teaching Certificates	30
Enrollment and Registration	31
Fees Schedule	31
General Academic Policies	33
Curricula	39
Undergraduate Curricula	39
Bachelor of Arts Degree Programs	39
Bachelor of Fine Arts Degree Programs	41
Bachelor of Music Degree Program	42
Bachelor of Technology Degree Programs	42
Bachelor of Liberal Studies Degree Program	42
Graduate Curricula	42
General Education Program	42
Courses of Instruction	48
Departments and Undergraduate Programs	49
Interdisciplinary Courses and Programs	144
The Graduate Program	148
Admission	148
Assistantships	151
Master's Degree Programs	152
Master of Arts Degree	155
Master of Arts in Education Degree	166
Master of Business Administration Degree	170
Master of Music Degree	171
Specialist Degree	173
Specialist in Education Degree	174
Doctor of Education Degree	178
Doctor of Industrial Technology Degree	181
Cooperative Doctoral Program	184
State Board of Regents	185
Administrative Staff	185
Emeritus Faculty	192
Instructional Staff	195
Index	210





Campus Map Directory

Building numbers begin at the north end of campus and continue to the south.

Academic and Activity Areas

- 33 Art No. 2 F-5
- 10 Athletic Fields A-7
- 20 Auditorium Building H-6
- 35 Baker Hall F-5
- 50 Biology Research Complex H-4
- 49 Ceramics Studio H-4
- 29 Communication Arts Center D-5
- 26 Crafts Shop and Archaeological Lab G-6
- 18 East Gymnasium and Pool G-6
- 13 Education Center E-6
- 41 Erickson Garage C-5
- 17 Home Management House H-7
- 54 Industrial Technology Center H-3
- 45 Latham Hall G-4
- 27 Old Administration Building H-6
- 8 Physical Education Center B-7
- 19 Physics Building G-6
- 1 Price Laboratory School E-10
- 34 Psychology No. 1 F-5
- 31 Russell Hall E-5
- 37 Sabin Hall G-5
- 40 Science Building H-5
- 38 Seerley Hall H-5
- 30 Strayer-Wood Theatre D-5
- 22 West Gymnasium E-6
- 36 Wright Hall G-5

Residence and Dining Areas

- 16 Bartlett Hall F-7
- 2 Bender Hall E-8
- 6 Campbell Hall E-7
- 53 College Courts D-2
- 15 Commons Dining Center F-6
- 4 Dancer Hall E-8
- 42 Hagemann Hall D-4
- 55 Hillside Courts 1-1
- 14 Lawther Hall E-7
- 47 Noehren Hall D-3
- 28 President's Residence H-6
- 46 Redeker Center E-4
- 43 Rider Hall E-4
- 48 Shull Hall E-3
- 3 Towers Dining Center E-8

Administration and Institutional Areas

- 23 Campanile F-6
- 7 Center for Business and Behavioral Research F-7
- 15 Commons and Media Center F-6
- 21 Culture House H-6
- 44 Gilchrist Hall (Administration) G-4
- 39 Greenhouse G-5
- 24 Library F-6
- 5 Mathematics Learning Center F-8
- 25 Maucker University Union G-6
- 52 Museum and Plant Services Building C-2
- 32 Power Plant No. 1 F-5
- 51 Power Plant No. 2 A-3
- 12 Student Counseling and Health Center E-7
- 9 UNI-Dome C-6

UNI — 1984-1986

Spring Semester 1984 —

Jan.	11	Wed., Orientation and Registration, 8 a.m. to 4 p.m.
Jan.	12	Thur., Instruction begins, 8 a.m.
March	3	Sat., End of first half semester, 12 noon.
March	10	Sat., Spring vacation begins, 12 noon.
March	19	Mon., Instruction resumes, 8 a.m.
May	3-9	Thur.-Wed., Final examinations.
May	5	Sat., Commencement, 2 p.m.
May	11	Fri., Semester ends, 4 p.m.

Summer Session 1984 —

June	4	Mon., Registration, 8 a.m. to 4 p.m.
June	5	Tue., Instruction begins, 7:30 a.m.
June	29	Fri., End of first 4-week session.
July	2	Mon., Second 4-week session begins, 8-week session instruction continues, 7:30 a.m.
July	4	Wed., Legal Holiday.
July	27	Fri., Summer sessions end.
July	27	Fri., Commencement.

Fall Semester 1984 —

Aug.	27-28	Mon.-Tue., Orientation and Registration, 8 a.m. to 4 p.m.
Aug.	29	Wed., Instruction begins, 8 a.m.
Sept.	3	Mon., Legal Holiday.
Oct.	19	Fri., Academic Holiday (no classes)
Oct.	20	Sat., End of first half semester, 12 noon.
Nov.	21	Wed., Thanksgiving vacation begins, 12 noon.
Nov.	26	Mon., Instruction resumes 8 a.m.
Dec.	15	Sat., Commencement, 2 p.m.
Dec.	17-21	Mon.-Fri., Final examinations.
Dec.	21	Fri., Semester ends.

Spring Semester 1985 —

Jan.	16	Wed., Orientation and Registration, 8 a.m. to 4 p.m.
Jan.	17	Thur., Instruction begins, 8 a.m.
March	9	Sat., End of first half semester, 12 noon.
March	16	Sat., Spring vacation begins, 12 noon.
March	25	Mon., Instruction resumes, 8 a.m.
May	9-15	Thur.-Wed., Final examinations.
May	11	Sat., Commencement, 2 p.m.
May	17	Fri., Semester ends.

Summer Session 1985 —

June	7	Fri., Registration, 8 a.m. to 4 p.m.
June	10	Mon., Instruction begins, 7:30 a.m.
July	3	Wed., End of first 4-week session.
July	4-5	Thur.-Fri., Legal Holiday.
July	8	Mon., Second 4-week session begins, 8-week session instruction continues, 7:30 a.m.
Aug.	2	Fri., Summer sessions end.
Aug.	2	Fri., Commencement.

Fall Semester 1985 —

Aug.	26-27	Mon.-Tue., Orientation and Registration, 8 a.m.-4 p.m.
Aug.	28	Wed., Instruction begins, 8 a.m.
Sept.	2	Mon., Legal Holiday (Labor Day).
Oct.	18	Fri., Academic Holiday (no classes).
Oct.	19	Sat., End first half semester, 12 noon.
Oct.	21	Mon., Instruction resumes.
Nov.	27	Wed., Thanksgiving vacation begins, 12 noon.
Dec.	2	Mon., Instruction resumes, 8 a.m.
Dec.	14	Sat., Commencement.
Dec.	16-20	Mon.-Fri., Final examinations.
Dec.	20	Fri., Semester ends.

Spring Semester, 1986 —

Jan.	15	Wed., Orientation and Registration, 8 a.m.-4 p.m.
Jan.	16	Thur., Instruction begins, 8 a.m.
March	8	Sat., End first half semester, 12 noon.
March	15	Sat., Spring vacation begins.
March	24	Mon., Instruction resumes, 8 a.m.
May	8-14	Thur.-Wed., Final examinations.
May	10	Sat., Commencement.
May	16	Fri., Semester ends, 4 p.m.

Summer Session, 1986 —

June	6	Fri., Registration, 8 a.m.-4 p.m.
June	9	Mon., Instruction begins, 7:30 a.m.
July	3	Thur., First 4-week session ends.
July	4	Fri., Legal Holiday.
July	7	Mon., Second 4-week session begins.
Aug.	1	Fri., Summer sessions end.
Aug.	1	Fri., Commencement.

The University and Its Program

The University of Northern Iowa is a member of the American Association of Colleges for Teacher Education (AACTE), the Council of Graduate Schools in the United States, and the American Association of State Colleges and Universities (AASCU), and the American Association of Colleges for Teacher Education (AACTE). The university is accredited through the master's degrees, the specialist's degrees and the doctorate (Doctor of Industrial Technology and Doctor of Education) by the North Central Association of Colleges and Secondary Schools (NCA). The university is also accredited by the National Council for Accreditation of Teacher Education (NCATE). The programs of the university are accredited by the following professional accrediting agencies: the National Association of Schools of Music, the National Association of Schools of Art, the National Council of Social Work Education, the American Speech-Language-Hearing Association, and the American Home Economics Association. Programs are also approved by the Iowa State Department of Public Instruction, the National University Extension Association, and the American Chemical Society. In addition, the University Museum is accredited by the American Association of Museums.

The university was established in 1876 by enactment of the Iowa General Assembly, and opened on September 6, 1876, as the Iowa State Normal School — "a school for the special instruction and training of teachers for the common schools of the state." The university now offers a broad curriculum at both the undergraduate and graduate levels. Four conventional baccalaureate degrees are offered: the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music, and the Bachelor of Technology. Also available is the Bachelor of Liberal Studies, an "external" degree offered in cooperation with the University of Iowa and Iowa State University. On the graduate level, seven degrees are offered: the Master of Arts, the Master of Arts in Education, the Master of Business Administration, the Master of Music, the sixth-year Specialist and Specialist in Education degrees, the Doctor of Industrial Technology degree, and the Doctor of Education degree.

The academic structure of the university reflects the continuing changes in higher education and the university's endeavors to meet the educational needs and demands of society. Principal academic units are the four instructional Colleges, the School of Business, and the Graduate College; their purposes, functions, and philosophies are summarized in the pages which follow. The instructional groups, which include both schools and departments, are:

College of Education —

- Curriculum and Instruction
- Educational Administration and Counseling
- Educational Psychology and Foundations
- Library Science
- School of Health, Physical Education, and Recreation
- Special Education
- Teaching

College of Humanities and Fine Arts.

- Art
- Communication and Theatre Arts
- Communicative Disorders
- English Language and Literature
- Modern Languages
- School of Music
- Philosophy and Religion

College of Natural Sciences —

- Biology



- Chemistry
- Earth Science
- Industrial Technology
- Mathematics and Computer Science
- Physics

College of Social and Behavioral Sciences —

- Economics
- Geography
- History
- Home Economics
- Political Science
- Psychology
- Social Work
- Sociology and Anthropology

School of Business —

- Accounting
- Business Education and Administrative Management
- Management
- Marketing

Though established as the Iowa State Normal School, the institution was renamed the Iowa State Teachers College in 1909 and under this title attained a national reputation and status as a leading institution in the field of teacher education. By enactment of the Iowa General Assembly on July 5, 1961, the name of the college was changed to the State College of Iowa and degree programs were added for those not planning to teach. The change to the University of Northern Iowa was effected on July 1, 1967, following enactment by the Iowa General Assembly on the recommendation of the State Board of Regents. Its current statement of mission was approved by the Board of Regents in 1978:

"The University of Northern Iowa at Cedar Falls is recognized as having a mission of sufficient scope to enable it to be a distinguished arts and sciences university with an outstanding teacher education program. It provides leadership in the development of programs for the pre-service and in-service preparation of teachers and other educational personnel for schools, colleges, and universities. The institution offers undergraduate and graduate programs and degrees in the liberal and practical arts and sciences, including selected areas of technology. It offers pre-professional programs and conducts research and extension programs to strengthen the educational, social, cultural, and economic development of Iowa and the larger community. Evolution from a state college to a university entailed a broadening of offerings, development of more specialized undergraduate and graduate pro-

grams, and greater emphasis on research and public professional services.

"It is imperative that the quality of the University's instruction be maintained and enhanced through increasingly strong emphasis on: 1) general or liberal education as the most essential ingredient for the undergraduate student, 2) the central importance and complementary relationship of teaching and research, 3) enrichment of instruction through extensive clinical, laboratory and field experiences, and independent study, and 4) development of the life of the University community itself as an effective educational force. In order to serve students of all ages and to be responsive to their needs and preferences and to the needs of society, it is imperative that the University offer a variety of programs in such areas as liberal arts, arts, business, social work, and technology. It will offer no major programs in agriculture, architecture, dentistry, engineering, forestry, hospital administration, law, pharmacy, medicine, or veterinary medicine.

"In the area of teacher preparation the University must remain at the forefront of developments in the field of education and be prepared to offer instruction in new areas required by society. Furthermore, UNI should be more than merely responsive to changing needs and interests of its students and society. It must provide leadership in education innovations, programs, and research.

"Future programs will be determined by the continuing study of existing programs and of developing needs. Programs will be curtailed or eliminated when the assessment of need and resources indicates that resources could better be devoted to other programs. The University approaches the addition of new programs with considerable caution. Generally, new programs are fashioned out of existing programs in response to developing needs. However, if the University is to remain vital, it must consider at the appropriate time the development of some new programs that fall within its general mission and meet the new needs of students and of society."

University status brought increasing attention to research and services, particularly in the field of education, as well as the offering of a broader curriculum on both the graduate and undergraduate levels. To complement the initial Bachelor of Arts programs, the Bachelor of Technology was added in 1968, the Bachelor of Music in 1969, and the Bachelor of Fine Arts in 1976. The expansion of the graduate-level degree programs reflects the university's continuing efforts to meet the needs of higher education; seven degrees are now offered: The Master of Arts in Education, the Master of Arts, the Master of Business Administration, the Master of Music, the Specialist and the Specialist in Education, the Doctor of Industrial Technology, and the Doctor of Education. The graduate program is given in detail beginning on page 148.

The University of Northern Iowa has grown from its 1876 original campus site of 40 acres with one building — Central Hall which originally housed orphaned children of Civil War soldiers — until it now embraces more than 40 principal buildings on a campus of 720 acres, with a faculty of about 580 members and a total enrollment of about 12,000. In addition to its physical growth, the university continues to support programs that reach into the wider community, including the UNI Center for Urban Education (UNI-CUE) which is located in the heart of the urban area of Waterloo, Iowa. The internationally known *North American Review*, which was established in 1815 in Boston and is the oldest periodical in the United States, is now published under the auspices of the University of Northern Iowa.

The university is located in Cedar Falls, Iowa, which has a population of approximately 35,000, with the Cedar Falls-Waterloo greater metropolitan area having a population of more than 110,000. Together with the State University of Iowa and Iowa State University of Science and Technology, the University of Northern Iowa is governed by the State Board of Regents.

College of Education

The College of Education includes seven instructional units and the Office of Student Field Experiences, each concerned with some aspect of professional education in one or more program areas. Programs offered in this college lead to the degrees Bachelor of Arts, Master of Arts, Master of Arts in Education, Specialist, Specialist in Education, and the newly approved Doctor of Education (Ed.D.). All of these programs have a career orientation, and most are preparatory to careers in education as a teacher, school library media specialist, counselor, administrator, or supervisor; the exceptions are in closely related fields — undergraduate community health, community recreation, and therapeutic recreation majors and graduate majors in counseling, communications media, and health.

The various units which comprise the college are described below:

Curriculum and Instruction — Early childhood education, elementary education, middle school/junior high education, reading and language arts, safety education, educational media and communications media, and education of the gifted. The department also operates the Reading Clinic and a day care center.

Educational Administration and Counseling — Graduate programs at the master's and specialist's levels and Ed.D. intensive study areas in educational administration and counseling.

Educational Psychology and Foundations — Educational psychology, measurement and evaluation, and social foundations of education. The department is responsible for the Common Professional Sequence required of all prospective teachers, and operates the Educational Clinic in conjunction with its state certification program in school psychology. The department has three master's and two specialist's graduate degree programs and an Ed.D. intensive study area in school psychology.

School of Health, Physical Education, and Recreation — Health, physical education, recreation, graduate studies, General Education, and Campus Recreation. The school also offers instructional programs in athletic training, coaching, and dance, and operates university cardiac rehabilitation, wellness, and sports medicine programs. Extensive intramural, open recreation, and club sports programs are available within the Campus Recreation Division.

Library Science — Library orientation and school library media specialist.

Special Education — This department offers undergraduate emphases for early childhood, elementary, and middle/junior high school majors and for secondary teaching majors. Graduate programs include emphases in severe/profoundly handicapped, preschool handicapped, elementary and secondary mentally and emotionally disabled, plus administration and consultant programs and an Ed.D. intensive study area in special education.

Student Field Experiences — This office is responsible for administering the student teaching component and other field experiences of UNI's undergraduate teacher education program. A statewide network of cooperating school centers offers a variety of student teaching sites in urban, suburban, and rural school systems. Each center is staffed with a resident coordinator who is a member of the UNI faculty and who is responsible for administering the student teaching program within the center and for supervising student teachers on a regular basis. Carefully selected supervising teachers who possess special qualities, teaching skills, and levels of competence also provide continuous classroom supervision for the student teachers.

Teaching — The Department of Teaching is responsible for the operation of the Malcolm Price Laboratory School which is an integral part of the university's teacher education program and serves three basic functions: it provides a direct-experience laboratory for all

undergraduate and graduate teacher education students; it operates as a center for research, experimentation, and curriculum development; and, it provides leadership to the elementary and secondary schools of Iowa and the nation through publication, consultation, and a variety of in-service programs and activities. A comprehensive instructional program is offered for school pupils in nursery-kindergarten through grade twelve, including programs for special education and talented/gifted students.

Since its establishment in 1876 as the Iowa State Normal School, the University of Northern Iowa has maintained its affirmed commitment to the support of excellence in teacher education. This commitment was recognized by the Iowa General Assembly in 1967 when the function of the university was redefined to include as its primary responsibility the preparation of "... teachers and other educational personnel for schools, colleges, and universities..." It is also acknowledged by the university in organizing and defining teacher education as an all-university function.

The College of Education, however, has a particular responsibility for teacher education. Most of the undergraduate and graduate majors within the college are teaching-program majors, but the most widespread influence on teacher education is that all students seeking certification take professional preparation in the College of Education. For undergraduate students this professional preparation consists of a required professional sequence common to all teaching majors and a culminating student teaching experience, under university supervision, in one of the schools of the state.

The college is involved in continuing education, working closely with school personnel throughout the state on curriculum projects, surveys, and other activities, as well as sponsoring conferences and offering classes, institutes, and workshops both on and off campus. These activities illustrate the college's commitment to service, but the college also recognizes the critical importance of such involvement for insuring the vitality and relevance of its graduate and undergraduate programs of teacher education.

Department faculty within the College of Education are engaged in writing and research activities along with their classroom instruction. The Malcolm Price Laboratory School represents one area in which experimental and innovative projects are in continual operation, and these projects are open for observation and participation. Other research activities are also carried on by faculty and students.

College of Humanities and Fine Arts

The College of Humanities and Fine Arts includes the departments of *Art, Communication and Theatre Arts, Communicative Disorders, English Language and Literature, Modern Languages, and Philosophy and Religion, the School of Music, and the two public radio stations housed within Broadcasting Services.*

The College of Humanities and Fine Arts offers both graduate and undergraduate degree programs. In addition, it serves its own students and students across the campus with an extensive set of general education, elective and service courses.

At the undergraduate level, the B.A. is offered in all of the departments within the College of Humanities and Fine Arts. The B.F.A. (Bachelor of Fine Arts) is offered by the Department of Art and the School of Music. Additionally offered is the B.M. (Bachelor of Music) which emphasizes excellence in performance.

Included in the diverse major and minor programs found in college departments both at the undergraduate and graduate levels are: Art, English, English Linguistics, Teaching English to Speakers of Other Languages (TESOL), Journalism, French, German, Spanish, Russian, Music, Philosophy, Religion, Communications (Speech),

Public Relations, Radio-TV, Theatre, Speech/Language Pathology and Audiology (graduate level). In addition, there are programs offered cooperatively by the Departments of English Language and Literature and Modern Languages that combine in various ways Comparative Literature, English, Modern Languages, and TESOL. The School of Music offers majors in Music Education, Performance, and Theory-Composition, Music History, and Conducting which lead to the Master of Music (M.M.). The Department of Art has a major in Art and the School of Music a major in Music Theatre available under the Bachelor of Fine Arts degree. Recent additions to graduate and certificate programs of the college include a new major in Translation on the master's degree as well as certificate programs in bilingualism, translation and interpretation, and international commerce (the latter in cooperation with the School of Business). Efforts are currently underway to develop a new program in cooperation with the School of Business which would join an undergraduate major in the arts or humanities with the Master of Business Administration (MBA) at the graduate level.

The College of Humanities and Fine Arts also offers interdisciplinary undergraduate programs in Humanities and Russian Area Studies and shares responsibility for the American Studies and Latin American Studies majors. A pre-theological curriculum is available either on the Religion major or as a minor in combination with another major.

Additionally, the College of Humanities and Fine Arts sponsors a very wide variety of co-curricular activities for students of college grade in all majors, for talented high school students, and for the community at large. Some examples of these activities include the Tallcorn Music and Theatre festivals, the Annual High School Art Scholarship Competition, and a number of others. These activities, of course, are in addition to the many recitals and ensemble performances of School of Music groups as well as the dramatic performances staged by Theatre UNI and UNI Lyric Theatre. The fine and communicative arts are richly represented in the services offered to our colleagues and students, to the Cedar Falls/Waterloo community, and to the state of Iowa.

Administratively housed in the College of Humanities and Fine Arts are UNI's two separately programmed public radio stations. KUNI-FM serves the Cedar Falls/Waterloo, Cedar Rapids, and Iowa City areas at 90.9 on the dial. KUNI can also be heard at 98.3 in Dubuque and at 94.5 in the Quad Cities. This station broadcasts quality music and public affairs features for twenty-four hours each day. KHKE-FM, at 89.5 on the dial, serves the Cedar Falls/Waterloo metro area with a fine arts and music format. Students majoring in Radio-TV in the Department of Communication and Theatre Arts serve as interns for the two stations.

The College of Humanities and Fine Arts prepares its graduates for living and for earning in a rapidly changing social and economic milieu. While some of our students are aiming at teaching careers in the arts or the humanities, other students, in Communicative Disorders, for example, are moving toward careers as professional therapists. A number of our majors will become professional performers as musicians, artists, or actors. The largest number of students in the College of Humanities and Fine Arts, however, encounter us through their general education courses — in the humanities, in literature or writing courses, in religion and philosophy courses, in Introduction to Theatre, in a language course or in some other elective. Human achievements in the liberal and fine arts, we believe, are appropriate and useful studies for all the students of the university.

College of Natural Sciences

There are six instructional departments in the College of Natural Sciences. These are: *Biology, Chemistry, Earth Science, Industrial Technology, Mathematics and Computer Science, and Physics.*

Majors and minors are available in all departments on both teaching and liberal arts programs leading to the Bachelor of Arts degree. In addition, students may major in science on both programs; this is an interdepartmental major and is offered under the general jurisdiction and supervision of the Dean of the College.

Since science education does involve the cooperation of a number of departments, a science education faculty functions in promoting this cooperation. The science education faculty is comprised of individuals from various departments. A chairman coordinates its activities.

The degree of Bachelor of Technology may be earned with majors in the Department of Industrial Technology. This degree provides educational experience for those who wish to work as technologists in industry or as teachers in trade and technical schools.

There are graduate majors in all departments and science and science education for students working for a degree of Master of Arts. A major in science education may be selected for the Specialist degree. The Degree of Doctor of Industrial Technology was authorized in 1978.

The career opportunities for graduates in the College of Natural Sciences are numerous and diverse. All departments offer programs for prospective teachers in elementary and secondary schools. Departmental offices are excellent sources of information about other careers.

The College of Natural Sciences is involved in a number of interdepartmental and intercollegiate projects. An annual Science and Mathematics Symposium brings outstanding scientists to the campus to speak to selected high school students and their teachers, and the students compete for scholarships and other awards. An annual Industrial Education Exposition provides scholarships and awards for high quality projects of Industrial Arts and Trade and Industrial Education. Faculty members participate in a variety of interdisciplinary courses and programs.

College of Social and Behavioral Sciences

The College of Social and Behavioral Sciences houses eight instructional units: the Departments of *Economics, Geography, History, Home Economics, Political Science, Psychology, Sociology and Anthropology, and Social Work.* All units share a concern for understanding individuals and societies in their social, economic, and political relationships.

The college is the home of excellent professional programs and significant segments of the university's course offerings in the liberal arts. The college is committed to the principle that all students, including those in career-oriented programs, should receive the benefits of a broad, liberal education. A complementary commitment exists in a college-wide concern that graduates have reasonable vocational opportunities.

All departments in the college cooperate in the preparation of teachers and all instructional units except Social Work have programs which lead to a Bachelor of Arts - Teaching degree, the requisite degree for certification in a discipline as a secondary school teacher. Two collegiate interdisciplinary programs in Asian Studies and Social Science also lead to a teaching degree.

The Bachelor of Arts degree is awarded for studies in the liberal and vocational arts. Programs leading to non-teaching degrees are of-

fered in all academic departments. The college also cooperates in intercollegiate/interdisciplinary programs leading to the Bachelor of Arts degree in American Studies and Latin American Studies.

Graduate education is an important component of the mission and responsibilities of the college. The Master of Arts degree is awarded in geography, history, home economics, political science, psychology, sociology, and social science.

The primary function of the university and the College of Social and Behavioral Sciences is instruction. Every effort is made to provide diverse educational experiences. In addition to regular classroom activities, students receive individualized instruction through field experiences, internship assignments, and individual study projects. The college offers and participates in many off-campus programs.

Research and service are an integral part of the mission of the college. The college has excellent laboratory facilities, and many members of the collegiate faculty have achieved national recognition in their fields.

Vocational opportunities for graduates exist in a broad spectrum of positions in education, public and social service, commerce, and industry. Students interested in detailed information on careers may contact departmental offices or the university's Placement Center.

School of Business

The School of Business houses four instructional departments: *Accounting, Business Education and Administrative Management, Management and Marketing.* The B.A. (Bachelor of Arts) degree is offered by all four areas, and teaching certification in accounting, general business, secretarial/office education, and marketing and distributive education is offered by the department of Business Education and Administrative Management. Strong programs leading to the M.B.A. (Master of Business Administration) and M.A. (Master of Arts) are available to students at the graduate level. In addition, the School of Business serves many other disciplines throughout the university whose students desire to enroll in one or more of the professional courses offered by the School.

The primary objective of the School of Business is to provide a high-quality professional education that will enable its graduates to meet effectively the needs of modern society. In order to achieve this object, emphasis is placed on high-quality instruction at both the undergraduate and graduate levels. All courses, with only a few exceptions, are taught by full-time faculty members, most of whom have business experience in addition to holding advanced degrees. As a supplement to regular classroom instruction, students can enrich their educational experience by availing themselves of internships, cooperative work programs in industry and government, individual tutorials, and research projects.

Although quality teaching is emphasized, School of Business faculty members engage in a variety of research, both theoretical and practical, on matters of concern to business and government. Recent studies have focused on such diverse topics as collective bargaining legislation, advances in mathematical modeling, transportation, technology transfer to underdeveloped countries, business law, and environmental education. School of Business faculty members also participate in an Industrial Faculty Fellowship program which provides faculty members an opportunity to spend a summer working in a business firm on problems specific to that firm.

While the provision of a first-class professional education is their major concern, faculty members and administrators in the School of Business maintain a strong commitment to student preparation in the arts and sciences. Students are counseled to seek a broad educational experience, particularly at the undergraduate level, and to utilize the full resources of the university in their preparation for happy and productive lives.

General Information

The University of Northern Iowa has available for its students a wide variety of facilities, services, and activities for educational enrichment beyond the academic work in the classroom and assisting the student in round-the-clock living at UNI. These are described in the following sections:

- Student Housing
- Student Services
- Financial Aids and Student Employment
- Student Activities and Honors
- University Facilities and Educational Services

Student Housing

Application for Rooms in Residence Halls

The housing contract serves as the official application for a room reservation in the residence halls (see p. 23). The Housing Office will process the application upon receipt of both the completed contract and the \$30.00 deposit fee. If an applicant for whom a room has been reserved finds it necessary to cancel the contract, the deposit fee is refunded.

Occupancy

The residence period for new students commences one day prior to the beginning of the Orientation program; for returning students, occupancy may begin one day prior to the last day of registration for former students. If a reserved room is not occupied on the opening day of classes and arrangements which are acceptable to the Housing Office have not been made for later occupancy, the reservation will be cancelled.

The housing contract is for the entire academic year, or the summer session. If the contract is terminated before the expiration date, the refund plan as stated in the contract will apply; however, the student is responsible for any financial liabilities incurred prior to the date of termination.

Residence Halls

The Department of Residence provides a design capacity of 4,784 spaces in nine residence halls. In addition to student rooms, each hall contains lounges, study rooms, recreational areas, laundry rooms, and other facilities for the comfort and convenience of the students.

Within each hall, areas or wings which accommodate approximately 50 students are designated as houses. Each house elects its own officers and sponsors its own social, cultural, and recreational activities. A Resident Assistant (an upper-class student staff member) lives in each house to serve as an information resource to all students.

Women's halls include Campbell, Hagemann, and Lawther. Men are housed in Rider and Shull Halls. Coeducational housing includes Bartlett, Bender, Dancer, and Noehren Halls.

Family Housing

One- and two-bedroom apartments, furnished and unfurnished, are available to married students. Assignments are made on a date-of-deposit priority basis. Applications and all inquiries should be directed to:

Family Housing Office
3900 Jennings Drive - Hillside Courts
Cedar Falls, Iowa 50613



Dining Service

Dining service is provided in four dining centers across campus. The customary "full board" contract is for twenty meals per week; no Sunday evening meal is served. Three other board options are available: "no breakfast," "no weekend," and "no breakfast and no weekend." A student who lives off campus may contract to eat some or all meals in a university dining center. In Bartlett Hall only a "no-board room only" contract is available.

Student Costs

The over-all cost for undergraduate students who are residents of Iowa is approximately \$4,000 for the academic year.

Basic Fee	\$1050
Board and room	1700
Books, supplies and incidentals	1250

Non-resident students are charged an additional \$1,050 basic fee. For a full statement of fees (summer session, applied music, etc.) for both undergraduate and graduate students, see pages 31 and 32.

Students are required to provide their own books. Ordinarily the cost for these books will be \$100 to \$150 per semester. Students may buy their texts from any source. A student organization operates a book exchange at the beginning of each semester.

Student Services

Academic Advising Services — Academic Advising Services are designed to assist students plan their educational programs and use the resources of the University of Northern Iowa in meeting their special educational needs. The Academic Advising Center is located in Baker Hall, Room 161. Through a staff of professional and peer advisers, students receive advising assistance in selecting a major, selecting courses, scheduling, and identifying and resolving academic difficulties. Information is available to graduate and undergraduate students in many National Testing Programs. Special group programs are available to meet special student needs. The IMPACT program provides opportunities for new freshmen to participate in a structured orientation program their first semester.

Academic Advising Services coordinates a university-wide advising system which involves faculty advising as well as a variety of

student services. Freshmen are assigned to a faculty adviser in an area of their preference; freshmen having no preference of major are assigned to a general adviser in the Advising Center.

Advisement and registration of all new students are the responsibility of this office. Questions related to new student advisement and undergraduate advising should be directed to the Academic Advising Center, Room 161 Baker Hall, University of Northern Iowa, Cedar Falls, Iowa 50614.

Services of the Advising Center staff are available to all enrolled students at UNI.

Orientation — Orientation programs are offered for new students to acquaint them with university services and the registration process. Most new freshmen who begin their study in the fall semester attend a summer orientation program during the preceding June or July. Transfer students are invited to either a spring or summer transfer orientation program. Students who do not begin their study during fall semester attend orientation and register just before classes begin for that term. Parents of new students are invited to participate in a special parent orientation program.

Campus tours are offered by the UNI Admissions Office during the orientation program in the summer and throughout the year to prospective students and their families. Only students who participate in an orientation program may pre-register for classes. To arrange a visit to the campus, contact the Admissions Office, 172 Gilchrist Hall, University of Northern Iowa, Cedar Falls, Iowa 50614.

Student Health Services — The Student Health Center provides medical and mental health care to all students enrolled at the University of Northern Iowa. The spouse of a student is also eligible upon payment of the optional spouse Activity Fee at the Business Office in Gilchrist Hall. Services are provided by a well-qualified professional staff which includes physicians, an administrator, nurses, a pharmacist, technicians, and secretarial and clerical personnel. Services include consultation and treatment for illnesses and injuries, mental and physical health care, as well as preventive medicine.

The Student Health Center is located on the north side of the campus on 23rd Street, north of the Education Center and west of Lawther Hall. It is across the street from Bender and Dancer residence halls. The well-equipped out-patient clinic includes emergency, examination and treatment rooms, a laboratory, x-ray and pharmacy. No charge is made for routine clinic consultations, but a nominal charge is made for medicines, injections, x-rays, laboratory tests and other medical services. Although dental services are not available, the staff will furnish supervision and assistance in obtaining these and other services whenever needed.

The Health Center is open Monday through Friday from 8 a.m. to 5 p.m., during the fall and spring semesters and from 8 a.m. to 4 p.m. during the summer sessions. The Health Center is closed on Saturdays, Sundays, holidays, and usually whenever university classes are not in session. When closed, health problems should be discussed with a health aide in the residence halls. All hall coordinators and resident assistants have been trained by the Health Center to function on a health-educated layman's level of competence to recognize symptoms indicating a need for medical attention. They can suggest appropriate arrangements to students who are ill or injured. Emergency coverage is always available at any of the hospital emergency rooms in Cedar Falls and Waterloo.

It is recommended that all students have current immunizations. Diphtheria and tetanus booster immunization shots should be obtained every ten years.

A group accident and sickness insurance plan may be purchased through the university on a voluntary basis for those without medical

insurance or anyone not covered under their parents' insurance. Participation in the insurance program or proof of comparable coverage is recommended. Information on the coverage and the cost of this insurance is available from the Health Center. For your own protection, no student should be without health insurance coverage.

Speech and Hearing Clinic — The UNI Speech and Hearing Clinic provides diagnostic and remedial services for students with voice, rhythm, articulation, or hearing problems. Students who are concerned about their speech or hearing are encouraged to contact the clinic. Students are occasionally referred for remedial services by classroom professors, especially if the problem may interfere with a student's chosen profession.

Student Spouse Activity Program — The spouses of full-time UNI students may, by paying a fee equal to one-half the Student Activity Fee, entitle themselves to the university services and benefits which are available to students, e.g., health services, counseling and career services, library privileges, part-time employment services, and reduced rates for many university cultural, social, and athletic events. This program is designed to encourage spouses to participate as citizens of the UNI community.

Spouses who wish to procure an Identification Card should pay the appropriate fee at the cashier's window, UNI Business Office, 256 Gilchrist Hall. Spouses must be accompanied by their student husband/wife. The Identification Card is issued by the Scheduling Office, 244 Gilchrist Hall, upon presentation of the fee receipt.

Counseling and Career Services — The services of the Counseling Center are designed to assist students in becoming more effective as students and as persons, as well as to grow in self-understanding and thereby cope more effectively with immediate situations and with future decisions. The Career Center offers assistance to students in examining interests, values, skills, and the world of work before making career decisions. The UNI Counseling Center and the Career Center are located in the Student Counseling and Health Center building, and are staffed with professional counselors and psychologists who provide the following services:

1. Individual and group counseling in the areas of career planning, personal-social growth, interpersonal relationships, marital and premarital counseling, and human sexuality.
2. Career information files which include vocational trends, job qualifications, and training courses for hundreds of occupations.
3. Educational information files including requirements for all major and minor areas of study at UNI and catalogs for many colleges and universities.
4. Study skills seminars which provide efficient and practical study methods and test-taking techniques.
5. Referral services to other areas and agencies. A close relationship is maintained with the UNI Health Service for students who request medication.
6. Collaboration with faculty provides the services of the counseling staff as resource individuals in instructional classes or as consultants to individual staff members, departments, and residence hall staff.
7. Coordination of services for handicapped students.

The services of the Counseling and Career Services staff are available to all currently enrolled students without charge and to students' spouses who have purchased the spouse activity ticket. Limited services are available on a fee basis to former students, faculty, staff, and nonstudents. Interviews are confidential.

Appointments at the Counseling and Career Services Center may be made directly at the Center or by a telephone call. As a general rule, emergency appointments are available immediately and other appointments within a short time.

Placement Services — The Placement Center assists prospective graduates and alumni to secure positions in accordance with their qualifications and personal interests. The center maintains placement files for registrants, distributes job vacancies to registrants through the use of a computerized vacancy notice system and newsletter, invites representatives from school systems and companies to interview candidates on campus, and counsels with individuals regarding placement concerns.

Individuals will be allowed to register for placement services if they are in their final academic year and will complete a minimum of 30 undergraduate hours or 10 graduate hours at UNI.

There is no charge for consulting with staff regarding placement concerns. Students or alumni who wish to register with the center and establish a set of credentials must pay a fee.

Cooperative Education — Cooperative Education is an educational plan which integrates academic study with work experience. While involved in the co-op program, students alternate periods of classroom study at UNI with paid work in business, industry, or a government agency. All placements are credit bearing.

Cooperative Education benefits students by:

1. Providing relevant work experience to test career interests.
2. Supplementing theoretical knowledge learned on campus.
3. Improving prospects for employment after graduation.

Eligibility. Participation in the co-op program is optional on the part of students and selective on the part of the university. To be eligible for participation, the student must:

1. Have completed the freshman year at UNI. Transfer students must have been on campus at least one semester.
2. Be in acceptable academic standing.
3. Receive endorsement from an appropriate faculty member.

The Cooperative Education program is available to students in most academic majors. Placements can occur during the fall, spring or summer terms. In order to insure proper class scheduling, students are encouraged to contact the Co-op Office in Gilchrist Hall during their freshman year.

Learning Skills Center — The Learning Skills Center is a student service which is available to all students and offers the assistance necessary to develop or polish the academic skills that are essential to achieving a university degree. The services provided by the Center are divided into three programs: Reading, Writing, and Study Strategies. Each program offers assistance through one or more of the following services:

Informal Courses. Short, non-credit courses are offered twice each semester, scheduled throughout the day. Courses may include (1) Speed Reading, and (2) Effective Study Strategies, (3) The Term Paper, and (4) Others. Generally, these are survey courses which provide practice at developing a number of skills; for example, the Effective Study Strategies course includes time management, reading text books, note taking, test preparation, and other useful skills.

Individual Appointments. A student who wants to focus on one or more specific skills can make an appointment with an LSC instructor, and together they will plan a program of study. A student who has a

problem studying for a particular course, reading a certain textbook, and so on, can work with an LSC instructor to solve the problem. A student who needs to improve any aspect of his/her writing may arrange either an appointment or an on-going tutorial with one of the Center's writing tutors.

Self-Study Laboratory. The lab contains learning materials which complement the Center's reading, writing, and study strategies programs. Here students may use the LSC's resource materials at any time either to complete assignments which are part of their work at the LSC or as reference when doing their regular course work. Students are also invited to use the laboratory as a place to study.

In addition to the primary responsibility of helping students develop academic skills, the Center provides academic training for graduate students in appropriate curricula such as English, secondary reading, and counseling, and for undergraduate students in any academic major. The Learning Skills Center is staffed by full-time professionals and part-time student assistants and is located in Room 37, Auditorium Building.

Financial Aids and Student Employment

The University of Northern Iowa, through the Financial Aids and Student Employment Office, maintains a comprehensive program of financial assistance for its students. The office offers all of the federal student aid programs as well as a large and varied selection of scholarship assistance.

The Financial Aids and Student Employment Office is currently located in 105 Gilchrist Hall. Financial aid counseling is available to students throughout the year. A catalog of scholarships and financial aids delineating the financial assistance available to students at the University of Northern Iowa may be obtained by requesting a copy from our office.

Federal Student Aid Programs

Pell Grants — Are awards to help undergraduates pay for their education after high school. Maximum awards range up to \$1800. How much students receive will depend on their Student Aid Index, need, whether they are full-time or part-time students, and the cost of education.

National Direct Student Loan (NDSL) — This is a continuation of the program formerly known as the National Defense Student Loan program. Loans are available yearly to all qualified students. The amount of the Loan award is determined by the student's need. Interest at a low rate (currently 5%) begins 6 months after the borrower is no longer at least a half-time student. Repayment to the university is made in quarterly installments. Deferment while engaged in educational pursuits is available and certain cancellation factors may be used after completion of college.

Supplemental Educational Opportunity Grants (SEOG) — This is a continuation of the program formerly known as the Educational Opportunity Grant (EOG) program. It consists of a federal program of grant aid (not repayable) to deserving students with exceptional financial need. SEOG awards range from \$200 to \$2000 per academic year.

College Work-Study — This is a program for full-time students who demonstrate financial need and who require employment to help

defray educational expenses. The College Work-Study Program is a federally funded student financial aid program. The purpose of the program is to provide employment opportunities for undergraduate and graduate students. The student must show financial need. The minimum basic pay rate is the existing federal minimum hourly wage rate.

Guaranteed Student Loan — Undergraduates may borrow up to \$2500 for an academic year. The total amount an undergraduate may have outstanding cannot exceed \$12,500. Graduate students may borrow up to \$5000 for an academic year; the total amount any one student may borrow for a combined undergraduate and graduate program may not exceed \$25,000 in outstanding monies. The interest rate is 9 percent and repayment begins six months after a student ceases to be at least a half-time student.

Scholarships

The scholarship program of the University of Northern Iowa may be generally divided into: (1) General University Scholarships, which are available to all undergraduates; (2) General College Scholarships, which are available to all students in particular colleges; and (3) specific scholarships in departments and major fields.

Student Aid Scholarships are in the form of partial remission of fees and are authorized by the Iowa State Board of Regents. Applicants must be legal residents of Iowa, possess those qualities of character, personality, and academic ability essential for success at the university, and need aid in financing their education.

To aid in determining the financial status of the student and his or her family, every applicant for a Student Aid Scholarship, and/or the applicant's parents, is required to complete a form giving specific information concerning the economic position of the family and/or the student, including assets, liabilities, and income (Financial Aid form which is part of the scholarship service of the Educational Testing Service, or Financial Statement through ACT).

Merit Awards — A number of merit awards are available each year for new students coming directly from high school and those transferring from two-year colleges who have maintained excellent academic records. Students are selected without reference to financial need. There is no special application necessary. All admitted students who meet the general selection criteria are considered.

Art Department Scholarships are awarded annually to high school seniors interested in art as a major. Their value is the same as that of the Student Aid Scholarships. Interested students should contact the Department of Art.

Iowa Industrial Education Exposition Scholarships are awarded annually to high school seniors or Iowa area school or community college students interested in majoring in one of the seven major programs offered in the Industrial Technology Department at the University of Northern Iowa. These grants are made on the basis of the student's academic record, potential for success in industrial or industrial education positions, and an entry submitted at the Iowa Industrial Education Exposition held each spring on this campus. These grants provide a Student Aid Scholarship for four years. The value and regulations governing these awards are the same as for Student Aid Scholarships.

Army Reserve Officers' Training Corps Scholarships providing tuition, books, laboratory fees, and a tax-free allowance of \$100 per month are available for four, three, two, and one-year periods. Scholarship recipients who complete the program are required to serve on active duty for a period of four years.

UNI Athletic Grants-In-Aid Awards are provided by contributions from alumni, gate receipts, businesses in Waterloo and Cedar Falls, and other friends of the university. To be considered for this award, the student must be eligible for admission and must be recommended by the university coach of his sport and the athletic director.

Science and Mathematics Symposium Awards are made to high school seniors ranking highest on examinations in the areas of biology, chemistry, mathematics, earth science, and physics given each year on this campus. These grants provide cash and/or Student Aid Scholarships for four years. The value of and regulations governing these awards are determined on a yearly basis.

School of Business — Several scholarships are available to students enrolled in the School of Business. These include:

1. Undergraduate and graduate — the Irene Thompson Scholarship, open to full-time students, based on academic achievement.
2. Graduate — the Day Dugan Scholarship, open to MBA students.
3. Accounting — a) McGladrey, Hendrickson & Co. Education Award for \$250 for a graduating senior going into public accounting; b) Peat, Marwick, Mitchell & Co., five awards of \$400 for seniors who must be sitting for the CPA exam; c) Ernst & Whitney Scholarship of \$500 to a junior who will go into public accounting upon graduation; d) J.B. Paterson Education Grant of \$500 to a senior; e) Mosebach, Griffith & Co. Scholarships, two awards of \$500 to juniors who will go into public accounting upon graduation; and f) Honeywell Award of \$500 to a junior.
4. Business Education/Administrative Management — Undergraduate: a) Kenneth L. Hansen Award of \$100 to a student with a Business Education or Office Education emphasis and 2.75 GPA; b) Administrative Management Scholarship of \$400 to an active member of collegiate AMS with a 2.75 GPA and one semester left; and c) UNI-AOP Scholarship of \$100 to an Administrative Management major with a 3.00 GPA and is also based on financial need. Graduate: a) Lloyd V. Douglas Award of \$100 to a graduate in Business Education; and b) Delta Pi Epsilon Research Award of \$50, completed research paper required.

Graduate Scholarships and Awards — Several scholarships and awards are available for graduate students at UNI, and information on these may be obtained from the Graduate College office. Some of these scholarships and awards are for graduates in specific disciplines, and department offices and the academic colleges will assist with information on eligibility and application procedures.

In addition to the above, the Merchant Scholarship is available to a graduate of the University of Northern Iowa who plans to enter a graduate school with the intention of obtaining a graduate degree. Ordinarily the award is made to a student who has been enrolled in a graduate school and has done superior work at the graduate level.

Satisfactory Progress Scale

Freshman	20 hrs. per academic year 24 hrs. per academic year plus summer session
Sophomore	24 hrs. per academic year 28 hrs. per academic year plus summer session
Junior	26 hrs. per academic year 30 hrs. per academic year plus summer session

Senior	28 hrs. per academic year
	32 hrs. per academic year plus summer session

Required remedial course credits will be counted as meeting the above requirements. A completed course is one in which a grade of A, B, C, D, Cr, or P is assigned. Repeated courses previously completed successfully do *not* count as meeting the above requirements.

Students not meeting the above requirement may maintain their eligibility for financial aid if they have earned an average of 12 semester hours for each semester of enrollment at UNI. In computing the average hours, the hours earned in the summer session will be included in the total hours; but the summer session will not be included in the number of terms.

Credit hours earned at other institutions, after the initial UNI enrollment, will be included in the total hours when computing the 12 semester hour average.

Failure to maintain satisfactory progress for an academic year, during which a student is receiving financial aid, will result in the loss of financial aid eligibility until the student completes the hours during the next term of enrollment (summer session or semester) while *not* receiving financial aid. Students who fail, or withdraw from, all their courses in a given semester, while participating in a financial aid program listed below, will not be granted financial aid until they reestablish themselves with satisfactory course completion and grades. Students admitted as unclassified students, and/or part-time students enrolled for less than 12 hours, must pass half of their enrolled hours each semester.

Until the student is again eligible to receive assistance, no assistance will be awarded from the following student aid programs:

1. Pell Grant
2. Supplemental Educational Opportunity Grant (SEOG)
3. National Direct Student Loan (NDSL)
4. College Work-Study Program (CWSP)
5. Guaranteed Student Loan Program (GSL)

Financial aid eligibility may be regained in the following cases:

1. Student provides documentation of grade change(s) or course completion.
2. Student completes course work in a subsequent academic term or terms at UNI or another accredited college/university making him/her eligible for aid consideration in the semester following.
3. Bona fide medical reasons.

Any exceptions to these policies must be made by the Office of Financial Aid and Student Employment.

Note: Students are cautioned that the federally-funded student aid programs are constantly changing. Therefore, the eligibility criteria and other factors as set forth in this catalog may change before a new catalog is published. Explanatory materials and application forms for the above scholarships are available in the Financial Aids and Student Employment Office at the university. The preferred deadline for making applications is March 1. Students may complete either the Financial Aid Form or the Family Financial Statement. For further information, please request the bulletin, "Financing an Education at UNI," by writing to the Financial Aids Office, UNI.

Student Activities and Honors

Extracurricular activities are encouraged at the University of Northern Iowa because of the important contribution these activities make to the total education of the student. The university maintains an extensive program of extracurricular activities: intercollegiate athletics, dramatics, publications, forensics, music, social life, artists series, student organizations and interest groups, intramural sports and recreational activities, and sports clubs.

Music — Music organizations and ensembles are open to all students by audition. Participation by non-music majors is encouraged. Groups available are: University Choir, Concert Chorale, Women's Chorus, Varsity Men's Glee Club, Marching Band, Wind Ensemble, Symphonic Band, Jazz Bands, University Orchestra, Opera/Music Theatre, plus various instrumental ensembles.

Theatre — Any enrolled student is welcome to audition or volunteer for production responsibilities in the six major productions or many laboratory productions produced by Theatre UNI and UNI Lyric Theatre. Seasons typically include classical and modern drama, opera, musical comedy, children's theatre, and participation in the *Iowa Shakespeare Festival*. The theatre also produces a three-show summer season each year. All members of the university community are invited to attend productions in the Strayer-Wood and Bertha Martin Theatres.

Forensics — The forensics program, under the auspices of the Department of Communication and Theatre Arts, encourages participation of all interested students, both in debate and individual events regardless of major. The forensics squad participated in some thirty to thirty-five intercollegiate forensic meets per year on a regional and national basis. Participants may choose to enter debate or individual events. The latter includes public address, interpretation and acting events.

Intercollegiate Athletics — Various intercollegiate sports are available to both men and women at UNI. The university engages in intercollegiate athletic competition in a total of 19 sports. Men may participate in baseball, basketball, cross country, football, golf, swimming, tennis, indoor and outdoor track, and wrestling. Women also compete in basketball, cross country, golf, swimming, tennis, and indoor and outdoor track, as well as in softball and volleyball.

Campus Recreation — The division of Campus Recreation, under the auspices of the School of Health, Physical Education, and Recreation, has a variety of intramural sports activities, recreational activities, and sports clubs during the academic year. These programs are designed to provide opportunities for satisfying and enjoyable participation in an activity for each student and a program for every organization. These activities are held in the Physical Education Center, East Gym, West Gym, or on the playing fields west of the Physical Education Center.

Social Life — The social life at the University of Northern Iowa is a series of flexible programs designed to meet the ever-changing interests and needs of the students and university community. Social opportunities are offered in forms including popular films, art shows, live musical entertainment, forums, community service projects and dances. Much of the program planning relies heavily on student involvement. Information on how to become involved is available through the Programs/Student Activities Office in the lower level of Maucker Union.

Student Government — The student government associations include the UNI Student Association, the Residence Halls Association, the Interfraternity Council, Panhellenic, and the Union Policy Board.

The UNISA Senate — The Senate is the legislative branch of UNISA. The executive members include the president, administrative vice-president, academic vice-president, program vice-president, finance vice-president, and secretary. Elected senators are chosen on a population basis from university housing, off-campus housing, and the student body at large. The UNISA Senate endeavors to promote cooperation between students and faculty, seek solutions to student problems, and to represent the entire student body in matters affecting student interests.

Union Policy Board — The Union Policy Board of Maucker Union is composed of ten students and eight nonstudents. The Board recommends policy and regulations for the operation of the Union, and coordinates the programming events which are sponsored by the Union. In addition, it reviews fiscal matters and makes recommendations pertaining to the budget. Its officers are a president, vice-president, and secretary. The president and vice-president must be students.

Throughout the academic year, the Union Policy Board may discuss and decide on issues ranging from building hours to a review of programs in the Coffee House. During the summer months, a committee is usually appointed to oversee the operation of the Union.

Interest Organizations — Numerous organizations sponsored by departments and specialized interest groups provide students the opportunity to become better acquainted with other students and faculty as well as to explore and perpetuate interests outside the classroom. Many of the organizations have no membership requirements other than an active interest in the work for which the club exists and regular attendance at the meetings.

Graduate Student Organization (GSO) — Primarily the GSO is an advocacy group which unites the concerns and aspirations of graduates, and serves as a vehicle for intradepartmental and intracollegiate communication on points of graduate student interest. For example, the group organizes and develops seminars in the early fall semester on facilities available to graduates, including library rooms set aside for exclusive graduate use as well as computer facilities and training available. Seminars on thesis and research report writing and on graduate student placement are also likely candidates for GSO topics. Elected representatives to various other campus groups keep the graduates better informed on campus affairs and provide an input to these bodies from the GSO. Graduates are encouraged to investigate the organization and profit from their practical corporate interests.

Honor Organizations — Superior achievement in various academic disciplines and in extracurricular activities is recognized in honor organizations. Information on these organizations may be obtained from the Programs/Student Activities Office, Maucker Union.

Fraternities/Sororities — There are five social sororities and five social fraternities, each nationally affiliated, on the campus. Persons interested in Greek life must go through a formal or informal rush process held at the beginning of each semester. Leadership development, scholarship achievement and service to the university and community are stressed as important facets of individual development. The activities of the sororities are coordinated through the Panhellenic Association, those of the fraternities through the Interfraternity Council. Achievement in Greek life is recognized by the

local chapter of the National Order of Omega, an honor society for outstanding men and women with fraternal affiliation. Information may be obtained from the IFC/Panhellenic Office or Programs/Student Activities Office, which are located in the lower level of Maucker Union.

Religion — There are numerous opportunities for the nurture and maturing of the religious life of the student at UNI: planned religious activities, lectures, seminars, student religious foundations and organizations, the factual study of religion by way of courses in the curriculum, and religious counsel and worship in the churches and centers in the campus area.

Station KCRS — Station KCRS is a student managed and operated AM carrier current radio station which broadcasts at 970 KHz and serves students living on campus. KCRS broadcasts music, national and campus news, student programs, and UNI sporting events. Station studios and offices are in Maucker Union.

Student Publications — The *Northern Iowan*, a semi-weekly newspaper, is the principal student publication on the UNI campus. The *Northern Iowan* and other designated student publications are governed by the Board of Student Publications, a committee consisting of five students and four faculty members. Publication editors and advisers are appointed by the Board.

Professional Performing Arts on Campus — Each year, the UNI Artists Series brings to the campus five or six performances by internationally renowned artists from various fields of entertainment. A typical series may include not only soloists or ensembles performing serious music, but also dance and theatre. The UNI Chamber Music Series also presents four concerts by distinguished ensembles or soloists each year. Student tickets for these series are available at a considerably reduced price.

From time to time during the year, vocalists and instrumentalists from the popular music field are also presented on campus.

University Student Alumni Association — The UNI Alumni Association has a student branch group called USAA — University Student Alumni Association.

Programs include: a Senior Brunch, Finals Week Survival Kit, and the *Freshman Record*.

The USAA members participate in many social functions as UNI representatives. They serve as guides and public relations liaisons for special guests on campus. In general, the USAA members are goodwill ambassadors and are involved in many activities of the Alumni Office.

University Facilities and Educational Services

The Library — The University Library has a capacity of 700,000 volumes and provides seating for about 1,600 persons. Among the facilities and services available to library users are a variety of study spaces which include lounges and individual carrels, group studies, rental typewriters, photocopy service, a Graduate Study Room, faculty studies, calculators, video cassette players, and a room for blind students.

As of July 1, 1983, there were 583,752 volumes in the book collections. Included in this total is the non-circulating Reference Collection of 18,032 volumes and the Youth Collection, a representative collection of elementary and secondary school library material, currently consisting of 15,932 volumes. The Library has current subscriptions to 2,644 periodicals and 66 newspapers with extensive back files of most periodicals and a few newspapers. The Documents and Maps area houses collections of 28,425 maps and 187,830 documents which are publications of the United States and Iowa governments received on a depository basis. The Art and Music area has a sound recording collection of 7,410 discs and 700 cassettes and equipment for both individual and group listening. Microforms collections include 17,550 reels of microfilm, 413,574 microfiche, and 12,855 microcards. Other significant resources are Special Collections including Rare Books and the University Archives, the Browsing Collection, the Career Collection, Iowa and general information files, and Corporation Annual Reports.

The Library is open 101 hours per week during the fall and spring semesters, 85.5 hours per week during the summer session, with reduced schedules during vacations and interims. Variations from regular schedules are posted in the main lobby of the Library and are published in the *Northern Iowan*.

Maucker Union — The Maucker Union, located east of the UNI Library, serves as an informal meeting place for students, faculty, staff, alumni, and guests of the university. The unique facilities of the Union are useful for a wide range of activities including cultural, recreational, and conference events.

General services include: a campus information center, check cashing service, meeting rooms, and dining services which range from coffee service to banquets and luncheons. Recreational facilities include a billiards game room. The building houses the offices of the campus newspaper and student government groups. It is also the Student Activities Center for the campus.

Social and cultural activities include art exhibits, weekly movies, a series of "mini courses," and forums and lectures. The Union is financed through fee monies and income producing services within the building.

The Commons — The Commons serves the university community in a variety of ways. The facilities are available for movies, dances, banquets, parties, and other extracurricular activities, and are open to students, staff, and campus guests.

A primary function of the building is to provide a food service for the residents of Bartlett and Lawther halls.

The Commons Lounge (on the main floor) is used for teas, receptions, and other special occasions. The ballroom, also on the main floor, is a multi-purpose room used for banquets, movies, dances, and lectures. The general dining areas and kitchen are located on the ground floor.

A majority of the facilities of the Commons are utilized by the Educational Media Center for academic purposes.

Gallery of Art — Among the facilities offering cultural enrichment to the UNI student is the Gallery of Art operated under the auspices of the Department of Art and occupying the west end of the Communication Arts Center. A large main gallery is devoted to changing exhibitions that represent a wide range of international art interests. Each academic year there are six to eight major exhibitions.

Numerous activities are sponsored by the Gallery including lecture programs, concerts, seminars, and discussions. A volunteer docent program affords students the opportunity to work with children and community groups within the exhibition setting. Along with volunteer experiences in gallery management and museology, UNI students may arrange various types of individual study programs through the Gallery.

The Gallery of Art is an educational resource center where there is ample opportunity for broadening cultural vision or exploring the intricacies of art.

University Museum — The University Museum, accredited by the American Association of Museums, is used extensively as an educational resource by both university classes and area schools and as a cultural facility by local clubs and individual visitors.

The collections of the Museum embrace four subject categories: geology, biology, anthropology, and history. The geology collection consists of minerals, rocks, and fossils of worldwide distribution. The biology area includes a bird collection consisting of most birds indigenous to the midwest as well as some exotic, rare, and extinct species. Large and small mammals, reptiles, fish, anthropods, and marine invertebrates, including a vast collection of shells from around the world, are also a part of the biology collection. American, Iowa, and local history are represented from colonial times to the present by a wide variety of artifacts and printed documents. The anthropology area, which began with a collection of Indian arrowheads, axes, mauls, and Pueblo pottery, is at present time the most rapidly expanding area at the Museum and includes important collections from Africa, Asia, the Pacific Islands, and South America.

A public support group known as the Friends of the UNI Museum has been established to help the Museum through financial and moral support. Membership is open to anyone with the desire to see the Museum grow and expand its services.

Located in the Plant Services Building on 31st Street west of Hudson Road, the Museum is open, free of charge, daily from 9 a.m. to noon and from 1 to 4:30 p.m. during the school week. It is closed on legal and university holidays. Although large groups such as clubs and classes are asked to telephone or write the Museum for appointments, all other visitors are invited to come without appointments any time the Museum is open.

Curriculum Laboratory — The UNI Curriculum Laboratory is a facility where students and faculty, as well as in-service teachers and administrators, may pursue educational studies and projects related to curriculum and instructional development. The Curriculum Laboratory is located in Room 222 of the Education Center, near the main entrance to the building.

Materials available in the Curriculum Laboratory include textbooks, curriculum guides, resource units, research monographs, sample free materials, sample classroom periodicals, education journals, pictures, professional books, enrichment reading books, stand-alone references, kits, games, and instructional software.

Services provided by the Curriculum Laboratory include large and small group orientations, consultations, bibliography preparations for faculty, building tours, and special displays. Photocopiers are available for public use and the Education Center's lost and found is

located in the facility. In addition, Academic Computing's university-wide microcomputer laboratory is located adjacent to the Curriculum Laboratory where materials and services are provided by the lab staff.

The Curriculum Laboratory is open during fall and spring semesters from 7:45 a.m. to 10 p.m. Monday through Thursday, 7:45 a.m. to 4 p.m. on Friday, 1 to 5 p.m. on Saturday, and 1 to 9 p.m. on Sunday. Hours for the summer session are announced at the beginning of each session.

The Educational Media Center — The primary function of the Educational Media Center is to provide a variety of media, equipment, and services for the total university. The Educational Media Center consists of seven closely related areas — the Audio Production Services, the Audio-Visual Services (including the Audio Listening Center), the Communication Center, Graphics and Photographic Services, the Media Laboratories, Motion Picture Production Services, and Television Services.

Audio Production Services provides opportunities for professional sound recording, mixing, and editing in studio or on location. Located in the Education Center, this service is equipped to produce high quality master tapes in both reel-to-reel and cassette formats.

Audio-Visual Services, located in the Commons Building, is the university-wide service agency charged with the responsibility of obtaining, distributing, and coordinating media software and equipment. The A-V Center provides a complement of audio-visual equipment in each instructional building and also maintains a variety of media equipment which is available for checkout. The Audio-Visual Center maintains a library of media software consisting of 8 and 16mm films, regular and sound filmstrips, audio tapes and records, and slides. Facilities for previewing or examining materials are available in the Center, and a 48-carrel Audio Listening Center is available for individual or group use.

Five large lecture halls in the Education Center are equipped with the latest in multi-media utilization systems. Each lecture hall contains a multi-image rear screen projection system remotely controlled from an electronic podium. This system is capable of projecting 16mm films, slides, and filmstrips in any combination. Media utilization is scheduled through the Audio-Visual Center.

Graphic and Photographic Services, located on the ground floor of the Commons (west), provides consultation, design, and the production of media materials. Almost any type of audio-visual material can be produced locally to assist faculty and staff in developing effective and efficient instruction. Examples of such materials include overhead transparencies, posters, charts, reproduction copy for off-set, photographs, slides, and programmed slide series.

The **Media Laboratories**, located on the second floor of the Commons, provide facilities, equipment, and self-instructional programs for all students and faculty who want to produce their own instructional materials or learn the operation of a wide variety of audio-visual equipment. Self-instructional programs and staff assistance is provided for the operation of media equipment. In addition, a media supply room houses materials available for purchase.

Motion Picture Production provides a university-wide service in super 8mm and 16mm filming, including budgeting, production planning, filming, titling, limited animation, and sound recording. Two studios and an editing room have been established in the Commons for on-campus production activities.

Television Services provides numerous capabilities to the university community. A professional television studio is connected to five large classrooms, all equipped with television monitoring facilities. A smaller classroom-studio, with all equipment remotely controlled, can be scheduled for recording of student-teacher performance and

other classroom activities. Previewing areas, for both small and large group viewing of prerecorded video tapes, are also available.

The Communication Center, in the basement of the Education Center building, utilizes a unique color television system to distribute all types of audio-visual media to every classroom and laboratory in the building. The Center also contains a color television studio and control room for the origination of professional color television programming.

Academic Computing Services — Academic Computing Services, located on the ground floor east wing of Baker Hall, provides research and instructional computing services and facilities to UNI faculty, staff and students. Among the full range of services available are: custom programming and key entry, consulting and training on supported systems, and batch and interactive computing facilities. Newsletters and free training workshops are offered to UNI faculty, staff and students on a non-credit basis throughout the year.

Facilities: Academic Computing Services provides public computer terminal and microcomputer facilities at several locations around campus. The nearly 100 public terminals are distributed among the following instructional buildings: Wright, Seerley, Science, Industrial Technology Center, Physics, Communication Arts Center, Education Center, Baker, and the Library. In addition, the residence hall system provides a cluster of 12 terminals in the Redecker Center. The two public microcomputer facilities contain 18 Apple II+ systems, 10 of which are connected to a 20Mb hard disc via the Corvus Omninet system. These clusters are located in the Education Center and Wright Hall.

These remote terminals and computers are connected to a Harris 800 minicomputer housed in Baker Hall through a Gandalf port selector. The port selector establishes connections between the terminals/computers and the 80 ports available on the H800. This academic computing data network also provides access to the 32 ports available on the Harris 700 minicomputer used exclusively by the Department of Mathematics and Computer Science.

Graphics applications are supported on four Tektronix 4025 CRT terminals, a Graf-Pen GP6 digitizer and a Nicolet-Zeta 3653SX 4 pen drum plotter.

Finally, our NCS 7008 Optical Mark Reader provides both data entry and test scoring support to faculty and staff.

Services: Local batch and interactive computing is provided on the Harris 800. This system permits users to compile and execute programs written in FORTRAN, COBOL, BASIC, Pascal and APL languages. In addition to these languages, users of the Harris have access to SPSS and MINITAB statistical packages, to the INFO database management package and to the MUSE word processing system. Program and data entry are facilitated by the TX full screen text editor and a full complement of system utilities.

Remote batch computing resources are available through UNI's membership in the Regional Computer Center (RCC) based at the University of Iowa. This link provides users with access to the IBM 303X system at the University of Iowa and the National AS/6 system at Iowa State University. These systems support SAS and SASGRAPH, OMNITAB, and BMPD statistical packages as well as a library of useful mathematical routines (IMSL and SSP) and other more specialized software packages.

Test Scoring and Analysis service provides scores, item analyses and class rosters with scores for multiple choice classroom examinations. Twenty-four-hour turnaround is promised throughout the year.

Custom programming and key entry service is provided by ACS professional and student staff.

Workshops on the use of ACS supported software and systems are provided periodically. These non-credit sessions are offered free to UNI students, faculty and staff. Workshop announcements and other important information are publicized through the ACS newsletter.

All ACS services except for Test Scoring analyses are billed to the user's project number. Funds are available in each college to support instructional and unsponsored research computing.

Computer Center Hours: During fall and spring semesters the ACS facility in Baker Hall is open for use on the following schedule:

Sunday	Noon-2 a.m.
Monday-Thursday	7:30 a.m.-2 a.m.
Friday	7:30 a.m.-5 p.m.
Saturday	10 a.m.-4 p.m.

Holiday, semester break and summer session hours are different from these hours. They are announced several weeks in advance of the change.

ACS professional staff are available for consulting during the normal business hours of the university.

The Educational Clinic — The Educational Clinic is part of the Department of Educational Psychology and Foundations. Through its interdisciplinary work with individuals and small groups, the clinic performs an important task in the education of regular and special classroom teachers as well as special services personnel such as majors in early childhood education, special education, educational consultants, special learning disability teachers, psychologists, social workers, and counselors. Emphasizing family-school-community collaboration, the clinic maintains a primarily instructional and behavioral modification approach to learning disorders and questions of adaptability.

The clinic is concerned with a wide range of problems related to preschool enrichment, early identification of gifted and handicapped children, intellectual capability, aptitude, academic achievement, motivation, and personality adjustment. The clinic demonstrates, for teachers and service personnel, methods of evaluating a child's educational potential, provides an opportunity for service personnel interested in clinical teaching and special education to work with exceptional children in clinical experiences, translates psychological test findings and recommendations into educational terms and procedures, offers consultative services to the schools of Iowa at the request of school officials, and performs such research as practicable along lines that provide increased understanding of the learning and remedial processes.

The Speech and Hearing Clinic — This clinic offers speech and hearing services both to university students and to others outside the university community. These clinical services form an integral part of the program of professional preparation in speech-language pathology and audiology. Majors in speech-language pathology and audiology carry out clinical services under the supervision of the instructional staff of the university. Services offered include audiological evaluations, speech and language evaluations, and remediation for individuals with speech, language, and hearing problems.

Malcolm Price Laboratory School — Located on the north edge of the campus, Price Laboratory School serves as a direct experience laboratory for professional education programs of the university. The school provides a comprehensive educational program for a multiracial student body of 700 pupils in nursery school-kindergarten and grades one through twelve, including special education.

In addition to its role as a teacher education laboratory, the Laboratory School is widely recognized for its innovative and experimental programs, and for its work in research and curriculum development. The school is strongly committed to service to the elementary and secondary schools of the state, providing leadership through regularly sponsored conferences, workshops, and publications, and through its heavy involvement in the UNI program of extension and consultant services. The Laboratory School operates on an open-door policy; visitation and consultation are encouraged.

Educational Opportunity Programs — The University of Northern Iowa places a high priority on providing a quality education to financially disadvantaged and minority students. To fulfill this commitment to such students, the University has established the Office of Educational Opportunity Programs and Special Community Services.

The Educational Opportunity Programs are designed and coordinated specifically to meet the educational, social, and financial needs of the students. A primary goal for the EOP staff is to provide supportive services to all project students that will enhance the successful completion of the student's college career.

The Educational Opportunity Programs and Special Community Services structure includes the following five working components.

UNI-CUE (the University of Northern Iowa Center for Urban Education) is located in the heart of the urban area of Waterloo, Iowa, and is designed to increase the educational opportunities of disadvantaged people of all races. It works closely with the various university departments in the training of future teachers for working in the urban areas. In addition to offering tutorial assistance to students, the staff counsels with students and provides academic advice. The Center is also the site of college-level classes for members of the community, sewing classes for children and adults, and other community service activities. An innovative Early Childhood Communication Laboratory has been developed. The experimental program is designed to teach communication skills and prepare young children for elementary school.

Upward Bound is funded by the U.S. Office of Education. This program is designed to motivate the non-college bound student toward undertaking a college career. Students eligible for Upward Bound are those area tenth and eleventh grade, low-income and minority group high school students who are capable of succeeding in higher education but who do not have the educational background which would traditionally indicate college success. The Upward Bound Program has two basic phases to its total program. The initial "summer session" phase, which is held on campus, includes classes structured for college preparation and a variety of recreational, cultural, and enrichment activities. The second phase is the "academic year" while the student is still in high school; this provides a monthly stipend to program students and needed academic and personal counseling. To program graduates, Upward Bound gives its full support and assistance in securing higher educational placement.

The On-Campus E.O.P. program offers counseling, tutoring, and other appropriate supportive services to students who are admitted to the university through the E.O.P. in an effort to assure the educational success of these students. These supportive services include assistance with specific educational and financial needs of the student along with assisting in the setting up of the academic program of the individual student. E.O.P. counselors also provide advice and direction on social and personal problems which might interfere with the student's academic progress. All of the academic supportive services available through the On-Campus E.O.P. may be used by any university student; however, only program students may receive financial assistance through the program.

The **Graduate Educational Opportunity Program** offers supportive services to low-income and minority group graduate students in the areas of counseling, academic advising, and financial assistance. Some graduate assistantships for E.O.P. students are available through cooperation with academic departments of the university. In addition to actively recruiting students for the University of Northern Iowa graduate studies, the program provides information and assistance to E.O.P. graduates of UNI who wish to take higher degrees at other institutions.

The **Ethnic Minorities Cultural and Educational Center** was established on campus to provide a physical atmosphere for effective analysis of minority cultures and to further cross-cultural and racial understanding through participation in its programs by all segments of the UNI-Cedar Falls-Waterloo communities in a totally minority environment. The Center has a variety of actual instructional performance methods for displaying various minority cultural and art forms. The Center's library facilities provide a reference point for those interested in examining literature, records, and tapes of minority cultures.

Inquiries regarding the E.O.P. and Special Community Services should be made to one of the following:

UNI-CUE, 715 East 4th Street,
Waterloo, Iowa 50703
Upward Bound, 715 East 4th Street,
Waterloo, Iowa 50703
On-Campus E.O.P., Baker Hall, Room 132,
University of Northern Iowa, Cedar Falls, Iowa 50614
Graduate E.O.P., Baker Hall, Room 132,
University of Northern Iowa, Cedar Falls, Iowa 50614
Ethnic Minorities Cultural and Educational Center,
University of Northern Iowa, Cedar Falls, Iowa 50614

Inquiries not related to any specific area should be directed to the Assistant Vice President for Academic Affairs, EOP/SCS, University of Northern Iowa, Cedar Falls, Iowa 50614.

Iowa Lakeside Laboratory — The three Regents universities, the University of Northern Iowa, the University of Iowa, and the Iowa State University, jointly maintain a field biology station at Lake Okoboji. A scientific advisory board made up of representatives from each of the three state institutions has charge of the program. Unusual opportunities for field studies are available for students and teachers of biology. A variety of courses open to undergraduates and graduates is offered during the summer in two sessions of five weeks each. The Lakeside Laboratory Bulletin, available about February 1, lists the courses to be offered the following summer with detailed directions of enrollment. The courses regularly scheduled at the Laboratory are listed in the courses of the Department of Biology. Further information may be secured by writing to the Department of Biology, University of Northern Iowa. Registration is made through the Registrar's Office, University of Northern Iowa, Cedar Falls, Iowa 50614.

Iowa Teachers Conservation Camp — A field laboratory program in Iowa conservation problems and environmental education is offered at various locations in Iowa each summer. Two three-week courses, each carrying three credit hours, are offered: 84:104g Iowa Conservation Problems, and 82:230 Environmental Education Program Development. 84:104 is prerequisite to 82:230.

The program is jointly sponsored by the Iowa Department of Public Instruction, the Iowa Department of Soil Conservation, the University of Northern Iowa, and the State Conservation Commission. Further information and registration materials may be secured by writing to the Department of Biology, University of Northern Iowa, Cedar Falls, Iowa 50614.

Study Abroad — The University of Northern Iowa has several programs for study abroad. These include annual foreign language summer institutes, College of Social and Behavioral Sciences study seminars in Europe, a winter study program in Mexico, and a continuing exchange program with the Universidad de Tarapacá in Arica, Chile. The foreign language programs are conducted in France, Germany, Austria, Spain, and Latin America.

The **Summer Institute in Austria** (for teachers of German) is a seven-week program designed for those teachers who (1) need extensive training in understanding and speaking German, and (2) do not wish to see Austria and Germany as tourists but who would like to live among the people of those countries and have a personal contact with these people. Each participant will study and live with an Austrian family for seven weeks. Eight semester hours of graduate credit may be earned. Classes will be held at the Teachers' College in Klagenfurt, Austria.

The **Summer Institute in France** (for teachers of French) is a seven-week program held in Angers and Quimper, France. The institute program provides for eight semester hours of credit and is designed for teachers who (1) need intensive training in understanding and speaking French, and (2) would like to live among the French people and make personal contacts with French families in a French community rather than to see France as a tourist. Each participant will study and live with a French family in Angers for five weeks. Classes will be held daily at the Université in Angers, along with field trips and study tours. A two-week period of guided study and travel in Bretagne completes the program.

The **Summer Institute in Spain** (for teachers of Spanish) is an eight-week program held in Soria, Spain. The institute program provides nine semester hours of credit and is designed for primary and secondary teachers of Spanish who want intensive training in oral skills and who would like to have personal contact with the Spanish people. Each participant will live with a Spanish family in Soria for approximately six weeks while studying formal classes. A two-week study tour of areas of historical and cultural interest will follow the formal course work, including time to get to know Madrid.

The **Regents' German Program in Austria** is an eight-week program conducted jointly by the three Iowa Regents' universities in cooperation with private colleges in Iowa. Classes are held in the Austrian Alps and at the International Hochschulkurse of the University of Vienna. There will be approximately eight weeks of instruction on three levels: intermediate, advanced, and very advanced. This program is open to undergraduate and graduate students. Up to 10 semester hours of credit may be earned. Minimal admissions requirement for German is 12 semester hours of college-level German or the equivalent. There will also be one week of independent travel.

The **Regents' Program in France** is a seven-week program sponsored jointly by the three Iowa Regents universities. Students will spend five weeks in Lyon, France, where they will attend courses taught by professors from the universités in Lyon. While in Lyon, students will live with French families. The program is designed primarily for undergraduates and offers up to nine semester hours of credit, plus one week of independent study and travel.

The **Regents' Hispanic Institute** is an eight-week institute sponsored jointly by the three Regents universities of Iowa in cooperation with the Provincial Delegation of the Ministry of Education and Science of Burgos, Spain. Designed primarily for undergraduates, the program offers up to nine semester hours of credit, study in Burgos, and two weeks of touring other parts of Spain. While in Burgos, the students will live with Spanish families. Independent travel follows completion of course work.

Social and Behavioral Sciences Foreign Study Tours are sponsored by academic units within the College of Social and Behavioral

Sciences. Past and planned study tours include both summer and semester-length programs in Europe and the Far East. Programs are conducted in cooperation with foreign universities, institutes, and business firms. Seminars are coordinated by the college Programs. Participants may enroll for either undergraduate or graduate credit.

The **UNI Study Program in Mexico** is a three-week program held in Colima, Mexico. The program takes place during the semester break (December-January) and provides up to three (3) semester hours of credit. Eligibility requirements are that the student be in good standing, either currently or previously enrolled at UNI, with a minimum of one year of college-level Spanish, or the equivalent. Classes are held at the University of Colima and each participant is housed with a local Mexican family.

The **Coordinated Independent Studies Program** in Santiago de Compostela, Spain, provides the student of Spanish with the opportunity to study language and culture independently. The program will be structured to fit the student's needs and interests for a maximum of 16 credit hours per semester.

For additional information on these programs for study abroad, please write the Office of the Registrar, University of Northern Iowa.

Foreign Student Affairs — Undergraduate and graduate students who come to UNI from countries throughout the world are served by a central office located in Gilchrist Hall. Through the Office of Foreign Student Affairs, students are assisted in making arrangements to come to the campus from their home countries and in their daily campus activities while they are pursuing their educational careers.

The admission of international students is monitored by the Foreign Student Adviser who certifies the students' credentials necessary for entry to this country. Housing arrangements are made in advance; for single students in Bartlett Hall, and in the on-campus Family Housing area for married students who bring their families. Throughout the year, foreign students may seek the assistance of the Foreign Student Adviser in academic, personal, and immigration matters.

The International Student Association is open to all foreign and American students.

For information concerning foreign admission, contact the Office of Foreign Student Affairs, 172 Gilchrist Hall, University of Northern Iowa.

Regents Universities Student Exchange Program — University of Northern Iowa students may take courses at either of the other two Regents universities for UNI resident credit. Regular, degree-bound students in good standing at any of the three Regents universities may attend another Regents university for a maximum of two semesters (three quarters). Approval for participation and credit in the exchange program must be obtained well in advance of registration since the department head must approve the acceptance of such credits if these are to apply on the major. Detailed information and application forms for the exchange program are available from the Office of the Registrar, UNI.

National Student Exchange — The University of Northern Iowa is affiliated with the National Student Exchange (NSE), a consortium of state colleges and universities throughout the country that arranges for students to study on the various campuses of the consortium institutions as visiting students. The purpose of the Exchange is to enable participating students to get better acquainted with different social and educational patterns in other areas of the United States, to broaden their cultural perspectives, and to take advantage of specialized courses or unique programs at other NSE Institutions. Among the 60 colleges and universities with which UNI students can

exchange are: California State College (Northridge), California State University (Chico), New Mexico State University, University of Idaho, University of Montana, University of Alabama, State University College of Buffalo (New York), University of Southern Maine (Portland-Gorham), and the University of Wisconsin-Green Bay.

Students make exchange preparations through the Individual Studies office. Sophomores and juniors with at least a 2.75 grade point average may take part in the program for either a semester or an entire year. Summer exchanges are also possible with some institutions. Except for transportation expenses, costs are not greatly different from costs for study at UNI, and financial aid benefits can be applied to registration through UNI at another Exchange university.

More information about the National Student Exchange is available at the Individual Studies Office, Baker 59. Students initiate applications there under the advisement of the coordinator of Individual Studies. Applications may be submitted in the fall or spring semester prior to the academic year in which an exchange is planned.

Individual Studies Program — The Individual Studies Program at the University of Northern Iowa is open to undergraduate students who want to reach beyond the ordinary limits of a classroom course. Through this program academic credit is awarded to several different kinds of independent and small-group study. Students read and work alone, or in small groups, in search of self-expression and self-discovery. Students wishing to take advantage of this program need not have high grade point averages, but they are expected to be creative, self-reliant, and ready to accept challenges and take risks. Among the several options and opportunities available through the Individual Studies office are:

- Independent Study and Reading Projects
- Exploratory Seminars
- Individual Honors
- General Studies majors
- Individualized majors
- Bachelor of Liberal Studies
- National Student Exchange

The Individual Studies Program adds flexibility to undergraduate schedules at the university. The program awards academic credit to unique student interests — individual pursuits which lie either between or across several disciplines or in a discipline yet to be defined. Such credit, when appropriate, may be applied to elective hours, the major field, or to general education requirements.

In place of the structure ordinarily supplied by the instructor of a class, or by the staff of a department, the structure is provided by the student involved in a course of individual study, who chooses a consultant for guidance. The course of study, in either case, is no less rigorous than one employed in an ordinary class or major, yet the projects are tailored specifically to the interest of the student. Each individual program reflects the uniqueness of a student's own personal development.

Each semester the Individual Studies Program offers a variety of Exploratory Seminars (00:192) These courses are generally kept small to insure lively and informal discussion. Individual Study Project (00:198) is an opportunity for research, creative work, or experience-oriented study. Interdisciplinary Readings (00:196) enables the student to develop a program of readings on a topic not dealt with by one of the university's regularly offered courses. Group independent study (students who wish to study in a common area of interest) is possible through the Self-forming Seminar (00:192, Sec. 1). Individual Studies courses are listed each semester and summer session in the first section of the Schedule of Classes for that session. Information about these courses may be obtained from the Individual Studies office at UNI.

Individual Studies also makes possible a larger use of study opportunities at UNI. By taking a series of courses in this program over several semesters, students may be able to graduate "with Individual Honors." The course Undergraduate Thesis (00:197) is part of the requirements for students who wish to graduate with this distinction. Special approval is required to register for this advanced independent study course which culminates the program.

The Individual Studies Program gives support to field trips initiated by students, faculty, or seminar groups. Students are encouraged to attend conferences and discover learning situations away from campus. Unusual expenses for undergraduate theses and larger independent study projects are often subsidized through the program.

An **Individual Studies Major** and a **General Studies Major**, each leading to a baccalaureate degree, are offered by the university under the supervision of the Individual Studies Program. Details and requirements for these majors are given on page 146.

The Individual Studies Program is for the self-starters. Students who desire to work in an independent manner and wish to begin a project should contact the Individual Studies Office, Baker Hall, UNI.

General Studies Major — The General Studies Major at UNI is a diversified liberal arts major supervised by the Individual Studies office and is under the jurisdiction of the Individual Studies Board. The **General Studies Major** enables students to make a wide and varied use of university offerings which can lead to a well-rounded liberal arts education. Because the 45-hour program requires a minimum of 15 semester hours of 100-level courses from three of the five principal academic units* of instruction, the stress of this major is on distribution rather than concentration. (*See page 5 for academic units list.)

For some students the General Studies Major may provide a broad background for later, more specialized, study or training. Each student is encouraged to develop a program of courses according to his or her needs and interests, exploring a wide diversity as, for example, economics, history, art, philosophy, earth science, and mathematics — or a particular connection might be developed among courses in psychology, biology, educational psychology, and physical education. The 100-level courses that apply to the General Studies Major are those that normally involve study beyond the introduction to a discipline; however, lower-level courses which are prerequisite to or prepare for more advanced study may be used for elective credit beyond the 45-hour major requirement and, in some cases, may be applied to the General Education requirement for graduation.

The General Studies Major is not directed toward any particular vocation or for certification to teach, but serves a large need in the area of liberal arts education. Specific details for the program are given on page 146.

Advanced Placement Program — The University of Northern Iowa participates in the Advanced Placement Program of the College Entrance Examination Board. Through enrollment in special courses in a participating high school, a qualified high school senior may take achievement examinations in one or more academic subjects at the college level. UNI grants college credits in art, biology, chemistry, English, foreign languages, history, mathematics, music, and physics to students who pass examinations with scores of 3, 4, or 5. Details of this program may be obtained from the Director of Admissions, UNI. (For limitations on the total amount of credit earned by examination, see page 29.)

College Level Examination Program (CLEP) — The University of Northern Iowa is a participating institution in the College Level Examination Program (CLEP). Two types of CLEP Examinations are 20

given: General Examinations and Subject Examinations. CLEP Examinations are usually administered once a month throughout the year. Students who plan to attend UNI and who wish further information may write to the Office of Admissions or Academic Advising Services. (Information is also available in most high school counselors' offices.) Enrolled students interested in earning credit through CLEP should contact Academic Advising Services for information and dates of the examination. See page 37 for additional information about CLEP, including fees and amount of credit which may be earned through the program.

Division of Continuing Education and Special Programs — The University of Northern Iowa has had an organized extension program since 1913. As an integral part of its total responsibility to the state, the university has a legislative charge to provide public services to assist in the cultural, economic, and social development of Iowa residents. The division works cooperatively with the UNI staff in providing services to the public schools, business and industry, and other community and professional groups through a variety of programs. Included in Continuing Education and Special Programs are off-campus extension-credit work, non-credit classes, conferences and workshops, and publications. The Continuing Education Unit is also used, and details of this program are available in the division office.

Adult Education Classes — As a service to those who are interested in furthering their education, but not in earning university credit, the Division offers a variety of community classes in the metropolitan area. Classes are primarily upon request and are open to any adult regardless of educational background. These classes carry no credit, but if the course offered is listed in the university catalog, it may be possible for a person who completes the community class to receive credit in the course by special examination. Fees for community classes are established on the basis of the length of each class and the number of sessions.

Continuing Education and Special Programs is available to assist organizations and clubs in planning "continuing education" programs suitable to their needs and interests.

For a list of off-campus courses, credit and non-credit, or for information on the establishment of such courses, call or write the Office of Continuing Education and Special Programs, University of Northern Iowa, Cedar Falls, Iowa 50614.

Saturday and Evening Classes — As a service to persons in the vicinity of Cedar Falls, some resident university courses are scheduled for evening hours and for Saturday morning and include courses for both undergraduate and graduate students.

Students who plan to enroll for Saturday and/or evening classes ONLY may register by mail. Mail-in forms are available in the Office of the Registrar upon request. Schedules of evening and Saturday classes are generally available in August for the fall semester and in November for the spring semester. Specific instructions for registration by mail are contained in the schedule and on the mail-in registration form.

Students who register for Saturday and/or evening classes in addition to other classes will register for them at the time of the regular class registration, and may not register by mail.

Specific information for each semester's registration is available at the Office of Registrar.

Correspondence Courses — For people who find it inconvenient to attend campus classes, opportunities to learn are available through correspondence study courses. One may earn college credit toward a degree, work for teaching certificate renewal credit, or simply study an area of personal interest. Correspondence courses do not follow

the regular semester time schedule, permitting a student to enroll anytime.

Any student fully meeting university admission standards may enroll for correspondence study. Resident students at UNI may enroll for correspondence study provided such concurrent enrollment has been approved by the Dean of Continuing Education and Special Programs. Only by special advance permission of the Dean of the Graduate College may one use correspondence study credit to satisfy graduate degree requirements.

Military veterans and Vocational Rehabilitation clients may enroll in correspondence courses and arrange for partial financial assistance from their parent agency.

Currently correspondence courses are offered by fifteen academic departments. A brochure is available upon request to the Division of Continuing Education and Special Programs.

Extension Classes — Credit class work is offered off campus at many locations throughout the state as part of the university's instructional program. Factors of distance and staff availability are carefully considered in relation to requests for off-campus classes. There is no distinction between campus and off-campus credit in meeting degree requirements; however, not more than one-fourth of the academic hours needed for a baccalaureate degree may be earned through non-resident credit. Subject to stated Graduate College regulation, credit from extension offerings may be applied to graduate programs if the offerings are appropriate to the student's program needs and are approved by the student's adviser and the department. Two-thirds of the credit required for a graduate degree program must be earned in classes taught by University of Northern Iowa staff.

Conferences and Workshops — As a part of the university's program of continuing education many conferences and workshops are held throughout the year. Nationally known leaders in many facets of teacher education as well as in other academic areas are brought to the campus for these events. University credit may be earned in some of the workshops conducted during the summer session.

The Division of Extension and Continuing Education is a focal agency in assisting with the development and coordination of continuing education programs held on campus for various age-level groups, including many high school-level activities.

Exhibits — Exhibits of art, works of both UNI staff and students and touring exhibits, and displays of instructional materials are held periodically. Certain departments of the university sponsor special days for high school students with particular interests.

Broadcasting Services — The University of Northern Iowa operates two separately programmed public radio stations. KUNI-FM serves the Cedar Falls/Waterloo, Cedar Rapids and Iowa City areas at FM 91. KUNI can be heard at 98.3 FM in Dubuque and at 94.5 FM in the Quad Cities. The station broadcasts high quality music and public affairs programming 24 hours each day. KHKE, at 89.5 FM, serves the Cedar Falls-Waterloo metropolitan area with a comprehensive schedule of classical music and jazz. Both stations have a large core of active volunteers and are supported financially by the university and in part by the listening public. Student internships are available at the stations through the Communication and Theatre Arts Department. Studios and offices are housed on the third floor of the Communication Arts Center.

Office of Public Information Services — Helping develop public understanding of university aims, policies, and activities, both in the immediate campus community and with the public at large, is this

office's mission. To meet this responsibility, the staff works cooperatively with the faculty, administration and students as well as with the news media. Services offered include general news, publications, and public relations consultation.

The general news information service interprets programs of the university through news releases and photographs to the print and electronic media, in addition to articles for specialized and general interest periodicals. Institutional information files are maintained in order to answer requests and to assist representatives of the news media who call or visit the campus seeking background facts.

The publications service supervises the development and production of more than 400 brochures, catalogs, and other publications produced annually. It also serves in a consultative capacity to faculty and staff to assist them in determining the most effective ways of communicating through printed materials.

Produced in the office are the quarterly *Alumnus* magazine and the *UNI Century*, tabloid for parents of students, alumni, and friends of the university, as is *Intercom*, an internal newsletter for university employees, published by Personnel Services.

Faculty and students receive advice in the promotion of public events, and the public relations implications of university policies are discussed with members of the administrative staff. The office director also assists in the public information program of the State Board of Regents.

Alumni Association of the University of Northern Iowa

The Alumni Association of the University of Northern Iowa was organized in 1879 "to promote the interests of the alumni of I.S.N.S. (Iowa State Normal School) and to give social and intellectual improvements to its members." One of the early constitutions provided for a literary program of oration, history, and essay, which for many years was presented at the annual meeting on the day preceding spring Commencement.

With the growth and development of the institution, the Alumni Association has developed into a working organization pledged to further the best interests of the university and her graduates. All graduates of the University of Northern Iowa are eligible for membership in the association and are inducted into the organization as a part of the Commencement exercises. During the spring of 1977, the Alumni Association voted to once again become a dues-paying organization open to both graduates and friends of the university. Annual and life memberships are available. There is no membership fee to alumni currently pursuing a higher degree on a full-time academic year basis.

The *Alumnus* is the association's official publication of alumni and university news, and is sent quarterly to all members of the dues-paying Alumni Association. The *Century* is a quarterly tabloid newspaper which is sent to alumni, friends, and parents of students.

UNI Alumni Chapters meet annually in many of the major cities throughout the country. Alumni assist the university in many ways other than financial support, including cultural activities, recruitment of students, serving on university committees, and acting as a public relations arm for the university, including lobbying activities.

The Alumni Office now services the records of more than 60,500 alumni from its office in Latham Hall. The office provides assistance to alumni chapters and to alumni for conferences, workshops, and meetings on campus. The office coordinates Homecoming and reunions, parents weekend, and sponsors the University Student Alumni Association (USAA).

The University of Northern Iowa Foundation

The University of Northern Iowa Foundation is a non-profit corporation formed in 1959 to assist the university in projects which are vital to its growth and development but are most appropriately financed from private funds. Through its annual giving program, the Foundation provides alumni and friends of the university an opportunity to assist in extending the usefulness of the university, providing that margin of excellence which is characteristic of a university of quality.

The UNI Foundation was involved in a major capital campaign for the UNI-Dome to help celebrate the university's Centennial in 1976 and has an annual giving campaign. The Foundation works with alumni and friends on planned giving programs.

The Foundation is the official channel through which gifts, both large and small, may be given for the benefit of the University of Northern Iowa. Individuals and organizations are assured of continuity of management of such funds and of their being used for the purposes which the donor intended. As a charitable organization, all gifts to the Foundation are tax deductible. As an additional service for alumni and friends, the Foundation staff will provide assistance in estate planning.

Gifts should be addressed to:

UNI Foundation
Room 137 Latham Hall
University of Northern Iowa
Cedar Falls, Iowa 50614



University Policies

Admission

Admission Policies and Procedures

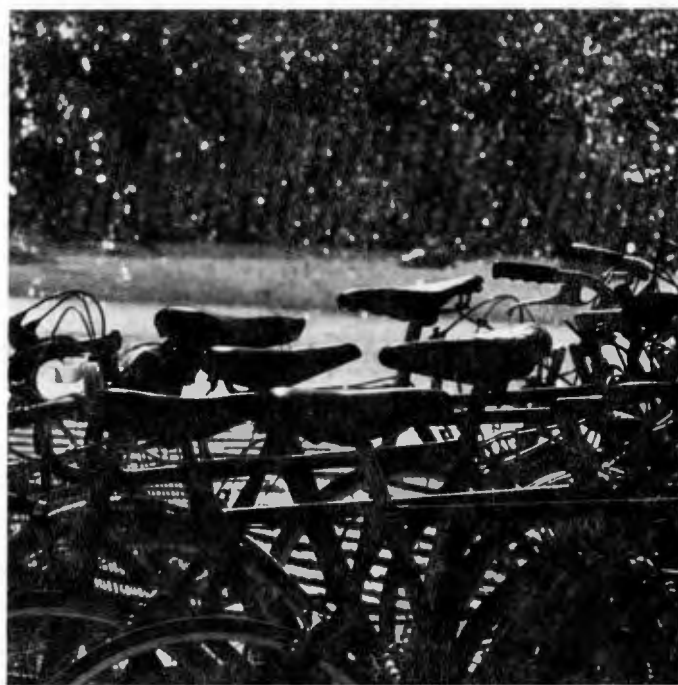
Before being permitted to register in the university a student must have filed an application for admission with the required records and other supporting material, have met all conditions, and have been issued an admission statement by the Director of Admissions. Individual students may be required to come to the campus for an interview. Those who do not give reasonable promise of success as students at the university may be denied.

Representatives of the university, both on and off campus, encourage or discourage an applicant for admission on the basis of his or her academic record, scores on standardized tests, seriousness of purpose, statements from teachers, counselors, school administrators, and similar evidences of potential ability to do college work. The admissions decision is not determined or influenced by the age, color, creed, handicap, national origin, race, religion, or sex of the applicant.

This school is authorized under Federal law to enroll nonimmigrant alien students.

A student should take the following steps in applying for admission to the university. These should be taken as far in advance as possible since admissions may be granted up to twelve months in advance of the opening of the term for which application is being made.

- A. **Application for Admission.** The application for admission form is obtained from the Director of Admissions, University of Northern Iowa, Cedar Falls, Iowa 50614. Complete the application carefully, and return as indicated on the form. Your request for an application for admission should indicate whether you wish to enroll for undergraduate or graduate study and the semester you wish to enter the university. Specific information for the admission of students to graduate study is given on page 148.
- B. **Application Fee.** A fee of \$10.00 must accompany the application. The fee is not refundable, except to Iowans who are denied admission, and is not applicable to later registration fees. The \$10.00 fee paid with the original application may be applied to a later entry within one calendar year.
- C. **Application Deadlines.** Applicants for admission should submit the required applications for admission and the necessary official transcripts and other required documents to the Director of Admissions at least ten days prior to the beginning of orientation for the session for which the student is applying.
- D. **High School Record.** Ask your high school principal to send a six- or seven-semester transcript if you ARE still in high school and a final report on graduation. If you are OUT of school, ask your principal to send a complete transcript. If you have attended more than one high school, a single report is sufficient if it includes all your work; otherwise, a report will be needed from each high school attended.
- E. **Transcripts of College or University Records.** If you have attended another college or university, an official transcript of record MUST be filed from EACH institution attended even though credit may not have been earned. If you are still enrolled in another college or university, a partial record may be used for considering admission, but a complete record will be required before your admission file is complete.



- F. **Tests and Interviews.** All new undergraduate students direct from high school and transfer students with fewer than 12 semester hours of credit are required to take the American College Tests before admission will be granted. The tests are given in all states.

Be certain to specify that your test record be sent to the University of Northern Iowa.

A visit to the campus is encouraged if convenient. In some situations the university may require an interview before acting on an application for admission. Students are notified if this is required of them.

- G. **Health.** Applicants for admission to UNI are not required to file a report of a physical examination or prepare a medical history. In the interest of providing optimum health care, the University Health Center recommends that incoming students who have physical handicaps or are expecting health problems provide the Director of the Health Center with information concerning their situation. (See page 10 for services available through the UNI Health Center.)
- H. **Housing:** A housing card is included with the notice of admission. (The completed card should be returned immediately to the Housing Office.) The card must be completed by all students, including those living off campus. A housing contract is sent to all students applying for university housing, and must be completed, signed, and returned along with the housing deposit.

Note: Admission procedures will be considered completed only when all required papers are returned to the university and all specified fees paid.

Students with a recognized baccalaureate degree who are seeking a second baccalaureate degree, teaching endorsements or approvals through UNI recommendation, and/or miscellaneous undergraduate coursework may be admitted through the undergraduate Office of Admissions. These students pay undergraduate fees and may not apply credit earned toward a graduate program.

Specific information for the admission of students to graduate study is given on p. 148.

Classification of residents and nonresidents for admission and fee purposes for all students is listed on p. 27.

Preparation for Undergraduate Admission to the University

For admission to the University of Northern Iowa it is recommended that the record of the student seeking admission be in conformity with the following pattern:

- I. Graduation from an approved high school shall ordinarily precede admission to the university. The student who applies for admission to an institution of higher learning shall, in general, have:
 - A. Completed a balanced program of studies designed to insure a well rounded background of knowledge in basic fields.
 - B. Developed proficiency in the use of the English language in reading, writing, and speaking.
 - C. Acquired proficiency in basic mathematical skills.
 - D. Developed effective study skills and work habits.
 - E. Developed an adequate intellectual, physical, moral, and social maturity.
 - F. Developed a sincere interest in further formal education.
- II. Those planning to enter the university shall be guided by the following standards in completing their preparatory academic work:
 - A. **English** — Since the ability to write clearly and to read with understanding and appreciation are essential to success in college, it is highly desirable that the student complete at least three and preferably four units in English, with strong emphasis on writing.
 - B. **Mathematics** — Mathematics has much to offer not only as a tool to further learning but as a means of providing basic education. Three years of study should be the minimum for those planning to attend college. Students planning to specialize in the sciences or in engineering should complete additional work in mathematics.
 - C. **Social Studies** — Social studies such as history, civics, government, economics, sociology, and geography are basic to the understanding and solution of contemporary problems in the community, in the nation, and in the world. From two to four units may well be devoted to this area by the prospective university student.
 - D. **Sciences** — The field is rich in possibilities for understanding the modern world. A minimum of two units in science is recommended. For those who plan to emphasize science or engineering, three units would be helpful.
 - E. **Foreign Language** — The prospective university student should develop a basic reading or speaking knowledge of a foreign language, classical or modern. For most students this would suggest a minimum of two years of study; three or four would be preferable.
 - F. **Art and Music** — This field offers opportunity for development in an important area of general education which can contribute much toward individual growth.
 - G. **Other Subjects** — Agriculture, business, home economics, industrial arts, speech, etc., when properly studied, contribute materially to the educational growth of the individual and as preparation for continued study as well as for the more general activities of living. The prospective university student with an interest in further study in a field related to one of these subjects should find one or two years of high school work in it to be particularly valuable.

Note: Effective for those students graduating from high school in the spring term 1984, and after, the following high school subject matter REQUIREMENTS (based on four-years of high school) apply.

- I. To meet requirements for admission to the University of Northern Iowa without subject matter restrictions, applicants must present a minimum number of credits/units in English and mathematics. These minimum requirements are:
 - A. **English**
Three (3) years of English of which at least one year identified as composition. Only credits in which a grade of C or better has been earned will apply toward this minimum requirement.
 - B. **Mathematics**
Three (3) years of mathematics of which at least one year must be in algebra in which a grade of C or better is earned.
- II. Applicants not meeting minimum subject requirements as listed above may be released from academic restrictions assigned at time of enrollment by giving evidence that they possess a satisfactory level of competence on basis of scores obtained on the ACT Assessment and/or the College Level Examination Program. Academic course requirements listed above will be waived for applicants able to obtain the following scores on standardized examinations.
 - A. **English**
 1. A student earning a standard score of 25 or above on the English Sub-Test on the ACT Assessment will have satisfied the English admission requirement.
 2. A student earning a percentile score of 70 or above on the English Composition Examination of the College Level Examination Program will have satisfied the English admission requirement. This examination requires an essay.
 - B. **Mathematics**
 1. A student earning a standard score of 26 or above on the Mathematics Sub-Test of the ACT Assessment will have satisfied the mathematics admission requirement.
 2. A student scoring at the 50th percentile or above on the Mathematics Subject Examination "College Algebra-Trigonometry" of the College Level Examination Program will have satisfied the mathematics admission requirement.
- III. A student meeting other admission requirements but not meeting subject matter entrance requirements in any manner outlined above will be required to satisfy the restrictions as follows:
 - A. **English**
 1. A student who ranks in the top-half of his/her high school class must satisfy the requirement by completing a non-credit course in English composition. The student should do this during the first term of enrollment and must satisfy the requirement during the first year of enrollment.
 2. A student who ranks in the lower one-half of his/her high school class may be required to limit his/her course schedule to less than the 17-semester-hour maximum. The student will be required to enroll in a non-credit course in English composition during the first term of enrollment. Upon successful completion of this high school-level course, the schedule load limits will be removed.

B. Mathematics

1. A student who ranks in the top one-half of his/her high school class must satisfy the requirement by completing a non-credit course in mathematics encompassing elementary algebra. The student should do this during the first term of enrollment and must satisfy the requirement during the first year of enrollment.
2. A student who ranks in the lower one-half of his/her high school class may be required to limit his/her course schedule to less than the 17-semester-hour maximum. This student will be required to enroll in the non-credit course in mathematics during the first term of enrollment. Upon successful completion of this high school-level course, the schedule load limits will be removed.

IV. Students transferring to the University of Northern Iowa before earning credit in English and/or mathematics will be included in policies outlined above. Students with college-level credit in English composition and/or mathematics will be released from the individual subject restrictions.

V. Students graduating from high school before spring term 1984, will be considered exempt from the new English and mathematics requirements.

General Admission Standards of the State Board of Regents

A. Admission of Undergraduate Students Directly from High School

Students desiring admission must meet the requirements in this rule and also any special requirements for the curriculum, school, or college of their choice.

Applicants must submit a formal application for admission, together with a \$10.00 application fee, and have their secondary school provide a transcript of their academic record, including credits and grades, rank in class, and certification of graduation. Applicants must also submit scores from the American College Test (ACT) or the Scholastic Aptitude Test (SAT), or the equivalent, as determined by each university. The Test of English as a Foreign Language (TOEFL) is required of foreign students whose first language is not English. Applicants may be required to submit additional information or data to support their applications.

1. **Graduates of approved Iowa high schools** who have the subject matter background as recommended by each university and who rank in the upper one-half of their graduating class will be admitted. Applicants who are not in the upper one-half of their graduating class may, after a review of their academic and test records, and at the discretion of the admissions officers:
 - a. Be admitted unconditionally.
 - b. Be admitted conditionally.
 - c. Be required to enroll for a tryout period during a preceding summer session, or
 - d. Be denied admission.
2. **Graduates of accredited high schools in other states** may be held to higher academic standards, but must meet at least the same requirements as graduates of Iowa high schools. The options for conditional admission or summer tryout enrollment may not necessarily be offered to these students.

3. **Applicants who are graduates of nonapproved high schools** will be considered for admission in a manner similar to applicants from approved high schools, but additional emphasis will be given to scores obtained on standardized examinations.
4. **Applicants who are not high school graduates**, but whose classes have graduated, may be considered for admission. They will be required to submit all academic data to the extent that it exists and achieve scores on standardized examinations which will demonstrate that they are adequately prepared for academic study.

Students with superior academic records may be admitted, on an individual basis, for part-time university study while enrolled in high school or during the summers prior to high school graduation.

In rare situations, exceptional students may be admitted as full-time students to a regent university before completing high school. Early admission to a regent university is provided to serve persons whose academic achievement and personal and intellectual maturity clearly suggest readiness for collegiate level study. Each university will specify requirements and conditions for early admission.

B. Admission of Undergraduate Students by Transfer from Other Colleges

Students desiring admission must meet the requirements in this rule and also any special requirements for the curriculum, school, or college of their choice.

Applicants must submit a formal application for admission, together with a \$10.00 application fee, and request that each college they have attended send an official transcript of record to the admissions office. High school academic records and standardized test results may also be required. The Test of English as a Foreign Language (TOEFL) is required of foreign students whose first language is not English.

1. **Transfer applicants with a minimum of twelve semester hours of graded credit** from regionally accredited colleges or universities, who have maintained a "C" average (2.00 based on an "A" grade being 4 points) for all college work previously attempted, will be admitted. Higher academic standards may be required of students who are not residents of Iowa.

Applicants who have not maintained a "C" average or who are under academic suspension from the last college attended may, after a review of their academic and test records, and at the discretion of the admissions officers:

 - a. Be admitted unconditionally.
 - b. Be admitted conditionally.
 - c. Be required to enroll for a tryout period during a preceding summer session, or
 - d. Be denied admission.
2. **Admission of students with fewer than twelve semester hours of college credit** will be based on high school academic and standardized test records in addition to review of the college record.
3. **Transfer applicants under disciplinary suspension** will not be considered for admission until information concerning the reason for the suspension has been received from the college assigning the suspension. Applicants granted admission under these circumstances will be admitted on probation.
4. **Transfer applicants from colleges and universities not regionally accredited** will be considered for admission on an individual basis taking into account all available academic information.

C. Transfer Credit Practices

The regent universities endorse the Joint Statement on Transfer and Award of Academic Credit approved in 1978 by the American Council on Education (ACE), the American Association of Collegiate Registrars and Admissions Officers (AACRAO), and the Council on Post-secondary Accreditation (COPA). The current issue of Transfer Credit Practices of Selected Educational Institutions, published by the American Association of Collegiate Registrars and Admissions Officers (AACRAO), and publications of the Council on Post-secondary Accreditation (COPA) are examples of references used by the universities in determining transfer credit. The acceptance and use of transfer credit is subject to limitations in accordance with educational policies operative at each university.

1. **Students from regionally accredited colleges and universities.** Credit earned at regionally accredited colleges and universities is acceptable for transfer except that credit in courses determined by the receiving university to be of a remedial, vocational, or technical nature, or credit in courses or programs in which the institution granting the credit is not directly involved, may not be accepted, or may be accepted to a limited extent.

Transfer credit from a two-year college will not reduce the minimum number of credit hours required for a baccalaureate degree if that credit is earned after the total number of credit hours accumulated by the student at all institutions attended exceeds one-half of the number of credit hours required for that degree.

2. **Students from colleges and universities which have candidate status.** Credit earned at colleges and universities which have become candidates for accreditation by a regional association is acceptable for transfer in a manner similar to that from regionally accredited colleges and universities if the credit is applicable to the bachelor's degree at the receiving university.

Credit earned at the junior and senior classification from an accredited two-year college which has received approval by a regional accrediting association for change to a four-year college may be accepted by a regent university.

3. **Students from colleges and universities not regionally accredited.** When students are admitted from colleges and universities not regionally accredited, they may validate portions or all of their transfer credit by satisfactory academic study in residence, or by examination. Each university will specify the amount of transfer credit and the terms of the validation process at the time of admission.

In determining the acceptability of transfer credit from private colleges in Iowa which do not have regional accreditation, the regent committee on educational relations, upon request from such institutions, evaluates the nature and standards of the academic program, faculty, student records, library, and laboratories.

In determining the acceptability of transfer credit from colleges in states other than Iowa which are not regionally accredited, acceptance practices indicated in the current issue of Transfer Credit Practices of Selected Educational Institutions will be used as a guide. For institutions not listed in the publication, guidance is requested from the designated reporting institution of the appropriate state.

4. **Students from foreign colleges and universities.** Transfer credit from foreign educational institutions may be granted after a determination of the type of institution involved and

after an evaluation of the content, level and comparability of the study to courses and programs at the receiving university. Credit may be granted in specific courses, but is frequently assigned to general areas of study. Extensive use is made of professional journals and references which describe the educational systems and programs of individual

Note: A transfer student who is allowed to enter with a grade point deficiency shall be placed on probation. Transfer students who have no grade point deficiency but whose previous college grade distribution, high school rank, test scores, or major objectives raises questions about probable success may be placed on probation.

Curriculum Adjustments for Transfer Students

1. The work of students who transfer from other institutions of higher education will be evaluated in terms of curriculum requirements at the University of Northern Iowa. In so far as possible, courses covering similar areas will be accepted in lieu of courses required here. Students who have had two full years of a general education or liberal arts curriculum will usually have satisfied many if not all of the requirements of the first two years. It should be understood that piecemeal work in several different institutions or an irregular pattern of work in a single institution will probably not meet many of the requirements of the first two years.
2. In determining the requirements for the baccalaureate degree, the records of transfer students will be examined in terms of the following requirements:
 - (1) The number of hours required for the degree less the number of hours accepted in transfer.
 - (2) All general education courses for which no reasonable substitute can be found.
 - (3) All work of the majors and minors, excluding such specific requirements as many have been met by accepted transfer courses, and including specific courses of the first two years or prerequisites for advanced courses where no acceptable transfer courses are presented. A transfer student is required to take at least 10 hours of work in the major at this university.
 - (4) Competence in writing is required of all candidates seeking degrees or university recommendation for certification.
 - (5) Scholarship requirements: (see statement *B-Scholarship* under *Requirements for Graduation*, p. 29).
3. Practices followed in evaluation of transcripts of record presented by the new transfer student include:
 - (1) College work presented by the transfer student is evaluated and reported by the student in terms of University of Northern Iowa equivalents when they exist. Credit earned in courses for which this university does not have an equivalent is simply reported as credit accepted. The student is also provided with another report including general university requirements still to be met.
 - (2) All college work previously attempted is considered for acceptance, including work for which a grade of D is earned. Grades of failure remain as part of the student's record and transfer grade index.
 - (3) If an undergraduate student repeats a course, only the last grade earned affects the cumulative average; the grade point value of the first grade is no longer included in calculating the cumulative average.

- (4) Transfer credit from a two-year college may be accepted to a maximum of 65 semester hours. This includes the total number of hours of credit accumulated by the students at any institutions which the students may have attended prior to concluding study at the two-year college.
 - (5) Credit earned in excess of the maximum credit acceptable from the two-year college is not applicable toward minimum total hours required for a degree. However, this work is entered on the student's record and may be used to meet specific requirements.
 - (6) A maximum of four (4) semester hours of physical education activity credit may be applied toward graduation requirements (except for students majoring/minoring in physical education or recreation).
4. Transfer students on the Bachelor of Arts-Teaching Program must fulfill the following requirements:
- (1) All remaining required courses in education and teaching.
 - (2) If courses equivalent to one or more of the common professional sequence courses can be determined, these may be accepted in lieu of like courses at this university. Ordinarily, students will be required to fulfill all three phases of the common professional sequence prior to student teaching.
 - (3) The same plan is followed in accepting credit for students who have completed a two-year program for teaching in the elementary school before transferring, except that they are not held for the professional courses of the first two years, if this requirement has reasonably been met.

Admission Requirements for Graduate Students

A graduate of a college or university accredited by the National Council for Accreditation of Teacher Education or by the North Central Association of Colleges and Secondary Schools or a corresponding regional agency will be granted admission to graduate study if his or her application for admission has been approved. See p. 148 for regulations governing admission to graduate study.

A graduate of a college or university that is not accredited may be granted provisional admission at the discretion of the Dean of the Graduate College.

Admission to graduate study does not guarantee admission to candidacy for an advanced degree.

Classification of Residents and Nonresidents for Admission and Fee Purposes

1. General —

- a. A person enrolling at one of the three state universities shall be classified as a resident or nonresident for admission and fee purposes by the Registrar or someone designated by the Registrar. The decision shall be based upon information furnished by the student and other relevant information. The Registrar, or designated person, is authorized to require such written documents, affidavits, verifications, or other evidence deemed necessary to determine the domicile of a student. The burden of establishing that a student is domiciled in Iowa is upon the student.
- b. In determining resident or nonresident classification, the issue is essentially one of domicile. In general, the domicile of a person is the person's true, fixed, permanent home and place of habitation. It is the place to which, whenever the person is absent, the person has the intention of returning.
- c. Under these regulations, a resident student is defined as one who is domiciled in the State of Iowa. A nonresident student is defined as one whose domicile is elsewhere. A student shall not be considered domiciled in Iowa unless the student is in continuous physical residence in this state and intends to make a permanent home in Iowa.
- d. A person who comes to Iowa from another state and enrolls in any institution of post secondary education for a full program or substantially a full program shall be presumed to have come to Iowa primarily for educational reasons rather than to establish domicile in Iowa. Such a person shall be classified nonresident unless and until such person can demonstrate that the previous domicile has been abandoned and an Iowa domicile established.
- e. The following facts and circumstances, although not necessarily conclusive, have probative value in support of a claim for resident certification:
 - (1) Reside in Iowa for twelve consecutive months, and be primarily in activities other than those of a full-time student immediately prior to the beginning of the term for which resident classification is sought.
 - (2) Reliance upon Iowa sources for financial support.
 - (3) Domicile in Iowa of persons legally responsible for the student.
 - (4) Former domicile in the state and maintenance of significant connections therein while absent.
 - (5) Ownership of a home in Iowa.
 - (6) Admission to a licensed practicing profession in Iowa.
 - (7) Acceptance of an offer of permanent employment in Iowa.
 - (8) Continuous presence in Iowa during periods when not enrolled in school.

Other factors indicating an intent to make Iowa the student's domicile will be considered by the universities in classifying the student.

- f. The following circumstances, standing alone, do not constitute sufficient evidence of domicile to affect classification of a student as a resident under these regulations:

- (1) Voting or registration for voting.
- (2) Employment in any position normally filled by a student.
- (3) The lease of living quarters.
- (4) Automobile registration.
- (5) Other public records, for example, birth and marriage records, Iowa driver's license.

2. Facts—

- a. A person who is moved into the state as the result of military or civil orders from the government for other than educational purposes, or the dependent of such a person, is entitled to resident status. However, if the arrival of the person under orders is subsequent to the beginning of the term in which the dependent is first enrolled, nonresident tuition will be charged in all cases until the beginning of the next term in which the student is enrolled.
- b. A person or the dependent of a person whose legal domicile is permanently established in Iowa, who has been classified as a resident for tuition purposes, may continue to be classified as a resident so long as such domicile is maintained, even though circumstances may require extended absence of said person from the state. It is required that a person who claims an Iowa domicile while living in another state or country will provide proof of the continual Iowa domicile such as (1) evidence that he or she has not acquired a domicile in another state, (2) he or she has maintained a continuous voting record in Iowa, and (3) he or she has filed regular Iowa resident income tax returns during absence from the state.
- c. Ownership of property in Iowa, or the payment of Iowa taxes, does not in itself establish domicile.
- d. A student who willfully gives incorrect or misleading information to evade payment of nonresident fees and tuition shall be subject to serious disciplinary action and must also pay the nonresident fee for each term attended.
- e. An alien who has an immigration visa may establish Iowa domicile in the same manner as a United States citizen.
- f. A person who has been certified as a refugee by the appropriate agency of the United States who enrolls as a student at a university governed by the Iowa State Board of Regents may be accorded immediate resident status for tuition purposes where he or she:
 - (1) Comes directly to Iowa from a refuge facility or port of debarkation; or;
 - (2) Has resided in another state for one hundred days or less; and
 - (3) Provided satisfactory documentation that he or she has an Iowa sponsor.

Any refugee not meeting these standards will be presumed to be a non-resident for tuition purposes and thus subject to the usual method of proof establishment of an Iowa domicile.

- g. Legislation effective July 1, 1977, requires that military personnel who claim residency in Iowa (home of record) will be required to file Iowa resident income tax returns. Military personnel will be expected to have filed Iowa resident income tax returns regularly if resident status is to be maintained.
- h. Change of classification from nonresident to resident will not be made retroactive beyond the term in which application for resident classification is made.

3. Guidelines —

The following guidelines are used in determining the resident classification of a student for tuition purposes.

- a. A student may be required to file any or all of the following:
 - (1) A statement from the student describing employment and expected sources of support as a student;
 - (2) A statement from the student's employer;
 - (3) A statement from the student's parents verifying nonsupport and the fact that the student was not listed as a dependent on tax returns for the past year and will not be so listed in future years;
 - (4) Supporting statements from persons who might be familiar with the family situation;
- b. A financially dependent student whose parents move from Iowa after the student is enrolled remains a resident provided the student maintains continuous enrollment. A financially dependent student whose parents move from Iowa during the senior year of high school will be considered a resident provided the student has not established domicile in another state.
- c. A student who was a former resident of Iowa may continue to be considered a resident provided absence from the state was for a period of less than twelve months and provided domicile is re-established. If the absence from the state is for a period exceeding twelve months, resident status would need to be re-established in the same manner as for an initial move to the state, unless evidence can be presented showing that Iowa residence has been maintained according to the established criteria. However, a long-term former resident who returns after an absence of more than one year but less than two years is allowed to regain residency after one year even though a full-time student.
- d. A student who has been a continuous student or a member of the military service since graduating from high school and whose parents move to Iowa may become a resident at the beginning of the next term provided the student is dependent upon the parents for major financial assistance.
- e. A student who moves to Iowa may be eligible for resident classification at the next registration following twelve consecutive months in the state provided the student is not enrolled for more than eight (8) credits (four credits during the summer session) in any academic year term and provides sufficient evidence of establishment of an Iowa domicile.
- f. If a person who is engaged in a religious vocation, Peace Corps, Vista, or alternate military service is a native Iowan, resident classification is maintained if he or she immediately returns to the state following the assignment. A person who enters such service from the state and who is on furlough may be considered a resident if he or she is returning to the field. If service has been terminated prior to returning to Iowa, the person would be presumed to be a nonresident if the return to the state was more than twelve months from the termination of the service.

4. Review Committee —

These regulations shall be administered by the Registrar or someone designated by the Registrar. The decision of the Registrar or designated person may be appealed to a university review committee. The finding of the university review committee may be appealed to the Iowa State Board of Regents.

Requirements for Graduation

In addition to the completion of one of the baccalaureate degree programs, there are other specific requirements for graduation which apply to all undergraduate students seeking any bachelor's degree, other than the Bachelor of Liberal Studies. These are listed below. See pages 153, 173 and 183 for graduation requirements for a graduate degree program.

A. Residence

1. Not more than 32 semester hours earned in correspondence, extension, radio, or television courses may be used toward graduation.
2. At least 36 weeks spent in residence *at this university* while earning in such residence at least 32 hours of credit, of which 20 hours must be earned in the junior and senior years.
3. At least 32 hours of credit earned in the junior and senior years in courses at this university. This total may include nonresidence credit.
4. The last semester or full summer session before graduation spent in residence at this university.

B. Scholarship

1. A student working toward the bachelor's degree with certification to teach must successfully complete student teaching and achieve a cumulative grade index in all course work attempted, at this university and elsewhere, of at least 2.40 to be recommended for graduation. The student must also achieve a cumulative grade index of 2.40 on all work attempted at the University of Northern Iowa.
2. A student working toward the bachelor's degree (without certification) must achieve a cumulative grade-index in all work attempted, at this university and elsewhere, of at least 2.00 to be recommended for graduation; he must also achieve a cumulative grade-index of 2.00 on all work attempted at the University of Northern Iowa.

Note: A student may be held by his or her academic department to specific grade point requirements for the major work and/or graduation which are higher than the grade point requirements for all university students. Students are advised to consult the section of this catalog that lists the specific major.

If a student has failed to be recommended for graduation because of scholastic average, the deficiency may be removed in a manner approved by the Committee on Admissions and Retention.

C. Communication

Competence in reading, speaking, and writing is required of all candidates seeking degrees or university recommendations for certification. All students who enter UNI on or after Fall Semester 1978 who are candidates for baccalaureate degrees are required to demonstrate competence in writing by passing the Writing Competency Examination.

D. Advanced Courses

At least 10 hours of work in a major in courses numbered 100-199 and taken at this university.

E. Maximum Credit by Examination

A maximum of 32 semester hours of credit earned by examination or by open credit is applicable toward degree requirements. This

includes credit earned by CLEP, by department examination, by Advanced Placement, and credit established by examination of other colleges and universities.

F. Physical Education

A minimum of 2 hours of physical education activity credit is required for graduation. Not more than 4 hours of physical education activity credit will apply toward graduation requirements except for students majoring or minoring in physical education or recreation.

No physical education activity course may be repeated for credit except with the approval of the head of the School of Health, Physical Education and Recreation.

A temporary release from physical education for all or part of a semester does not release the student from any part of the total requirement.

G. Listing of Candidates for Graduation

A student may be listed as a candidate for graduation at the end of a semester if the completion of work for which he is registered would meet all the requirements for graduation exclusive of grade points, and if the grade points to be earned do not exceed the number which could be earned for the hours for which the student is registered.

H. Application for Graduation

A student who expects to be graduated at the end of a semester must make written application at the opening of the semester. This application is filed in the office of the Registrar.

I. Second Baccalaureate Degree

To receive a second baccalaureate degree, a student must meet all the requirements for the second degree, including at least 36 weeks in residence after receiving the first degree and not less than 32 hours of credit in addition to that required for the first baccalaureate degree.

The university does not grant two degrees, one with a Teaching Program and one with a Liberal Arts Program, for the same basic hours of credit (130 hours). A student may have a double major, one in Teaching and one in Liberal Arts, but the Teaching major must be the first major and the degree granted on the teaching program since it has the higher hour and grade index requirement.

Additional Requirements for the Baccalaureate Teaching Program

Student Teaching

1. For the completion of any undergraduate curriculum the student must earn a minimum of eight (8) hours of credit (320 clock hours) in student teaching at this university, except that an undergraduate student with three (3) or more semester hours of credit in student teaching earned at the same level in another college or university may be released from four (4) hours of student teaching at this institution.
2. A teacher education major who has completed a two-year elementary teaching program at this university will not be held for additional student teaching if he/she desires to complete a major in elementary education. However, credit in Student

Teaching 28:138 (28:137 for majors in middle school/junior high school education) will be required if the student majors in a field other than elementary education.

3. A teacher education major seeking certification and a dual endorsement* (i.e., early childhood/elementary, elementary/early childhood, elementary/special area, elementary/secondary, etc.) is required to complete a minimum of twelve (12) hours of credit in student teaching.
4. A teacher education major may exercise the option to complete a sixteen (16) hour semester of student teaching.
5. Not more than sixteen (16) hours of credit in student teaching may be used toward the 130 hours minimum required for graduation.
6. A student must make application for student teaching at least one semester in advance of the time when work in student teaching is to be taken. Transfer students must complete one full semester in residence before being approved for student teaching. Student teaching is not offered during the summer session.

*authorization to perform a specific type of service at a particular grade level(s). Applicant must complete an approved program.

The Placement Center

Registration with the Placement Center is recommended for all individuals who expect to graduate from the University of Northern Iowa. All students are advised to register with the Placement Center no matter what their post-graduation plans are since it is extremely difficult to compile a set of credentials including references following graduation.

Teaching Certificates

Teaching certificates are issued by state departments of public instruction and are valid only in the state of issue. A college or university recommendation that a certificate be issued is required.

Students on the teaching program must meet requirements for an Iowa teaching certificate to be graduated from the University of Northern Iowa. At graduation they are eligible for the Professional Certificate, valid for a period of ten years for the kind of service indicated by the endorsement on the certificate; e.g., elementary teaching, secondary teaching, teaching a special subject such as art or music. The student can usually secure appropriate certification in other states by making proper application.

In addition to holding a certificate valid for the level of teaching being done, the secondary teacher must also have APPROVAL in each subject to be taught. Approvals are issued by the Iowa Department of Public Instruction on the recommendation of an acceptable preparatory educational institution. To secure the recommendation of the University of Northern Iowa, the student must usually meet the requirements for a major or a minor (or equivalent) in the subject. Exceptions are made only with the authorization of the university department offering the subject.

This university may recommend for certification those graduates of other colleges or universities who have completed their professional work here, but this is a discretionary matter and the university will expect such students to demonstrate excellence of scholarship and meet standards required of its own graduates. Such students must have been in residence at the University of Northern Iowa at least 22 weeks and earned at least 20 hours of residence credit.

Iowa requires a course in Human Relations and a course in American history or American government for all certificates.

For additional information, contact the Office of the Registrar, 243 Gilchrist Hall, University of Northern Iowa, Cedar Falls, Iowa 50614.

Hours of Credit Needed to Renew or Reinstate a Certificate

Renewal and reinstatement requirements are established by the Iowa State Board of Instruction and are subject to change by this body at any time. The Division of Teacher Education and Certification of the Department of Public Instruction distributes information concerning all changes in certification requirements to city and county superintendents and to the teacher-education institutions. Information concerning the renewal or reinstatement requirements may be obtained from the Registrar of the university of from

Department of Public Instruction
Division of Teacher Education and Certification
Grimes State Office Building
Des Moines, Iowa 50319



Enrollment, Registration and General Academic Regulations

Enrollment and Registration

Organization by Semesters — The university operates on the semester basis. This means that the work during the academic year is divided into two semesters of approximately seventeen weeks each. One semester hour of credit is based on one hour of work per week for seventeen weeks.

Summer Sessions — The 1984 and 1985 summer sessions will include a full 8-week session and several compact sessions of four to five weeks duration. In addition, there will be a number of special sessions and workshops of varying lengths. For information write the Office of Academic Affairs.

University Office Hours — The university's principal administrative offices are open from 8 a.m. to 5 p.m. on Monday through Friday during the academic year (from the beginning of the fall semester and generally to Memorial Day). During the remainder of the year (the summer months) the offices are open from 7:30 to 4:30 p.m. Monday through Friday. Specific dates are determined yearly.

Students and their parents are invited to come to the campus to make arrangements for university entrance. Such visits should be made on *Monday through Fridays* only, since all university offices are closed on Saturdays and Sundays.

All university offices are also closed for the following holidays:

	1984	1985
New Year's Day	Mon., Jan. 2	Tues., Jan. 1
Memorial Day	Mon., May 28	Mon., May 27
Independence Day	Wed., July 4	Thur., July 4
Labor Day	Mon., Sept. 3	Mon., Sept. 2
Thanksgiving	Thur.-Fri., Nov. 22-23	Thur.-Fri., Nov. 28-29
Christmas	Mon.-Tues., Dec. 24-25	Mon.-Wed., Dec. 23-25
	Mon., Dec. 31 (New Year's Day 1985)	

The university's academic calendar and holidays are subject to approval by the Board of Regents.

Registration Procedure

New Students cannot register for classes until all requirements for admission to the university have been met. After the admission requirements are met, new undergraduate students will receive their registration materials in connection with the orientation program provided for such students. Further instructions for completing registration will be given during the orientation programs.

Former Students returning to the university after a semester's or more absence, must file a *notice of intent to register* for the semester or summer session in which they plan to enroll. The notice of intent to register is filed with the Registrar's Office before registration so that the student registration materials can be prepared. Specific information for each semester's registration procedures is given in the front section of the Schedule of Classes for that particular semester; this schedule is available at the Office of the Registrar.

Veterans — The university cooperates with the Veterans Administration providing for the education of veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action in Vietnam may also receive financial assistance from the Veterans Administration. The Office of the Registrar will assist students eligible under any of these laws and provide the required reports. For additional information, contact the Office of the Registrar, University of Northern Iowa.

Veterans may be excused from the required activity courses in physical education upon filing a copy of a DD 214 form with the Registrar. This action does not excuse the student from completing the total number of hours work required for a degree.

Schedule of Fees

The schedule of fees set forth below applies to all university students as indicated. There is no *non-resident differential fee* for *non-resident students* taking less than five (5) semester hours during a regular semester of the academic year or less than three (3) semester hours during the summer session.

Effective Summer Session 1984

	Iowa Residents	Non- Residents
--	-------------------	-------------------

I. Basic Fees

A. Fall Semester, Spring Semester, or Summer Session¹

Undergraduate Credit Hours		
1	\$100	\$ 100
2	100	100
3	150	150
4	200	200
5	250	565
6	300	678
7	350	791
8	400	904
9	450	1017
10	500	1130
11	550	1243
12 or more	592	1350

Graduate Credit Hours

1	\$148	\$ 148
2	148	148
3	222	222
4	296	296
5	370	830
6	444	996
7	518	1162
8	592	1328
9 or more	660	1490

B. Workshops (xx:033, 133, 233) per credit hour.

(Workshops fees are paid on a credit-hour basis without regard to classification or resident status, and are assessed separately from the above schedule.)

¹ Includes \$45 per student for the fall or spring semester or \$20 per student for the summer session for student activities and specified building and debt service fees.

II. Residence Hall Fees

	Semester	Academic Year
Double Occupancy, all residence halls:		
Full board and room	\$850	\$1700
No board plan (Bartlett only)	382	764
Residence Hall activity fee	4	8
Single Occupancy, all residence halls: Add \$200* to above rates.		
No breakfast meal board option: Deduct \$25* from above rates.		
No weekend meals board option: Deduct \$30* from above rates.		
No breakfasts and no weekend meals board option: Deduct \$50* from above rates.		
(*each semester)		

Residence Hall fees for the summer sessions are approximately as follows: 4 weeks, \$212, 8 weeks, \$425 (these figures are based on double occupancy of rooms). Halls to be used in a given summer will be designated later and exact fees determined later (see Summer Session bulletin for specific details).

III. Other Fees

A. Applied Music	
1. Private lessons (1 credit hour)	\$45.00
2. Private lessons (2 credit hours)	80.00
3. Group (4 or more), per credit hour	25.00
B. Late enrollment fee	10.00
C. Credit by examination, university courses, per course	50.00
D. Correspondence, per semester hour	35.00
E. Extension or Television class, per semester hour	60.00
F. Transcript of academic record	
1. One transcript	3.00
2. Multiple copies, same order — \$3 plus \$1 for each additional copy	
G. Application for admission to the university	10.00
H. Reinstatement of enrollment after cancellation	10.00
I. Replacement of ID card or registration certificate	5.00
J. Writing Competency Examination	50.00
K. Minimum Fee for Remedial Courses carrying zero credit hours, per contact hour	100.00
L. Open Credit, per project	100.00

All fees and all policies governing the refund of fees are subject to change by the Iowa State Board of Regents.

Fee Payment and Billing — The University billing system for fall and spring semester enrollments offers students the option of paying their tuition fees and the residence hall room and board contracts in one payment at the time of billing or electing to be billed on a deferred payment plan of monthly statements. Under the billing system each university statement will give the student the option of paying the

"account balance" at the time of billing or the "minimum amount due" (installment amount). A \$5 administrative charge will be assessed one time per semester for the installment payment plan. Normally, four (4) installment payments can be made for a regular semester depending on the date of registration. No installment plan is available for the summer session.

Other fees for which students will be billed are parking permits, health center fees, athletic tickets, laboratory fees, married student housing rent, and miscellaneous fees which may occur. These are not included in the installment option.

All billings are mailed directly to the student and not to the student's parents. For billing dates and payment-due dates, refer to the Schedule of Classes for the appropriate session.

Note: Students electing to use the installment payment program to pay university fees are reminded that their registrations will be cancelled if payments are not made to the university Business Office by the date specified on the billing. Students may reinstate their registration after cancellation by clearing their indebtedness and paying a \$10 reinstatement fee within seven (7) days after cancellation. Cancellation of registration for nonpayment of university charges is a form of withdrawal and subject to the same regulations for assignment of grades. Students cancelled after the last day to withdraw without an "F" will receive failing grades unless their registration is reinstated, in which case they will receive the grades earned.



General Regulations

Withdrawal Refunds or Fee Reduction

The information below applies to students who withdraw completely from school during a semester or summer session. Dropping one or more classes does not constitute a withdrawal unless the student drops all classes for which he or she is registered.

If credit is earned during the period of enrollment, there is no refund or reduction of academic fees. For any two- or three-week session, there is no refund or reduction of academic fees. Room and board refunds are made according to agreement set out in the "Contract for Room and Board."

Academic fees for a student enrolled for a regular semester or summer session who withdraws from the University will be reduced the percentage indicated in the table below, beginning with the date of formal withdrawal with the registrar. The amount of reduction will vary from 90* to 25* percent through the fourth week of a regular semester, with no refund or reduction after the fourth week. For summer sessions, reduction percentages are on a day-count basis. (Please see the Schedule of Classes for information pertaining to a particular semester or summer session.)

Percentage of fee reduction	Semester Withdrawal by end of week* number —	Summer Withdrawal on day ** number —	
		Regular schedule (8-week or longer sessions)	Short schedule (4-week sessions)
90	1	1-3	1-3
75	2	4-5	
50	3	6-7	4-5
25	4	8-9	
0	later than 4th week	10 or later	6 or later

*Weeks are defined as seven calendar days. The first week begins with the day instruction at the university begins.

**Days are class days. Day count begins with the day summer session instruction begins. (See date in *Summer Schedule of Classes*.)

No refund for two- or three-week sessions.

Withdrawal Procedure

A student who has started attending classes, and who finds it necessary to withdraw from school, initiates the withdrawal through the Office of the Registrar. Those students who live in residence halls must also cancel the housing contract through the hall coordinator of the residence hall in which they live.

A student who has enrolled but decides not to come to the University of Northern Iowa should advise the Office of the Registrar in writing at as early a date as possible of the need to cancel the registration, listing the reason(s) for withdrawing from the university. Withdrawal after classes begin will result in a tuition charge.

Student Identification Card

Each new student receives a plastic Identification Card which is used throughout attendance at the university. Each semester or summer session the student also receives a registration certificate. This registration certificate serves to validate the Identification Card for the particular semester for which the registration certificate is issued. A fee of \$6.00 is charged to replace the plastic ID card and \$3.00 to replace the registration certificate. Replacement of both items would cost \$9.00.

Academic Program

The registration of every student is subject to the approval of his or her academic adviser.

The regular work of an undergraduate student for the fall or spring semester usually consists of 16 or 17 hours. First semester students are limited to a maximum of 17 hours.

During the academic year an undergraduate student who has a cumulative grade index of at least 2.5 may register for a maximum of 18 hours. An undergraduate student who has a grade index of at least 3.0 may register for a maximum of 20 hours. No student may be enrolled for more than 20 hours. Persons employed full time should not register for more than 6 hours of academic work during either semester.

The normal maximum undergraduate student load during the summer session is one semester hour per week of instruction. This is eight (8) hours in an 8-week session or four (4) equivalent hours in each 4-week session. Undergraduate students with a cumulative grade point average of 2.50 or higher may take 9 hours in the 8-week session. Those with a cumulative grade point average of 3.00 or higher may take 10 semester hours in an 8-week session or 5 hours in a 4-week session.

The maximum graduate student load during each semester of the academic year is fifteen (15) hours. Persons employed full time should not register for more than six (6) hours of graduate credit in any semester of the academic year.

The normal maximum graduate student load during the eight-week summer session is eight (8) hours; that normally permitted during each four-week split summer session is four (4) hours; that during the two-week post session, two (2) hours.

Exceptions to load restrictions for graduate students may be granted only by the Dean of the Graduate College.

A student may expect to devote up to three hours a week in class or study for each hour of credit for which the student is enrolled.

Classification of Students

	Earned Semester Hours
Freshman	less than 30
Sophomore	30-59
Junior	60-89
Senior	90 and over

Declaration of Major — Statement of Further Work

The declaration of a major is made through the department offering the major. The choice of major should be made as early as possible in the student's university career, usually by the beginning of the sophomore year, in order to complete the program and fulfill requirements for graduation with the normal four years of academic work. When the major is declared, the student is assigned an adviser in the major department and a *Student Declaration of Curricular Intent* with this information is filed (by the student) in the Office of the Registrar.

When a student has earned at least 60 hours of credit and has declared a major, he or she is eligible for a *Statement of Further Work* required for graduation. This is prepared by the Office of the Registrar and sent to the student.

Change of Registration

When a student finds it necessary to make a change in his or her schedule of classes — either to drop and/or add a course, change

sections of a course, or change to or from ungraded credit — a *Change of Registration* form must be completed and filed in the Scheduling Office.

Students may add classes, without approval, during the first seven (7) instructional class days of a semester. After the seventh instructional day of the semester and before the end of the first one-sixth of the semester the student must have departmental approval to add a class. For the summer sessions a proportionately equal amount of time is allowed at the beginning of a session for adding classes.

Classes are rarely added after the first one-sixth of the term. To add a class for credit after the first one-sixth of a term, the student must have the approval of the instructor, the student's adviser, the head of the department in which the course is offered, and the Dean of the College in which the course is offered. Courses dropped after the deadline for dropping with a *W* (*Withdrawn*), which is 10 calendar days after the end of the first half of the fall and spring semesters and at the mid-point of half-semester and summer session courses, will be recorded as failed (*F*) unless there are unusual circumstances and the student is doing passing work — in which case the instructor, the student's adviser, and the Dean of the College in which the courses are offered may approve a grade of *W*.

Pertinent dates governing the dropping and adding of courses, change to or from ungraded credit, and deadlines for making changes without charge are contained in the Schedule of Classes for that particular session.

Class Attendance

The responsibility for attending classes rests with the student. As the citizens of Iowa have every right to assume, students at this university are expected to attend class. This idea is neither novel nor unreasonable.

Students are expected to learn and observe whatever attendance rules may be required for the course(s) taught by each individual instructor. Caution, therefore, must be exercised lest needless absences affect the quality of work expected by the instructor.

Instructors will help students to make up work whenever the student has to be absent for good cause. Here again the matter lies between the student and instructor. Students should realize that an hour missed cannot be relived, that work can seldom be made up 100 percent, and that made-up work seldom equals the original experience in class. Where possible, a student should notify the instructor in advance of circumstances which prevent the student from attending class. The established policy makes students responsible for attendance, provides for whatever make-up work is possible when absence cannot be avoided, and frees students from securing and carrying excuses.

Instructors will notify the Registrar in case a student's attendance is such that his membership in a class is in doubt. Failure to make such reports often puts the university in an awkward position with the Veterans Administration, parents, or with the students themselves.

The Making Up of Work

To receive credit for course work a student is required to be in attendance for the full semester. Exceptions to this rule are rarely made.

Work lost by late enrollment or by change of registration may be made up for credit by an undergraduate student with the consent of the Office of Academic Affairs. Graduate students must have the consent of the Dean of the Graduate College.

Work lost because of absence due to illness, or other extenuating circumstances, may be made up, but arrangements for making up work missed are made between the student and the instructor.

Work left incomplete at the end of a semester or summer session will be reported as a *Failure* unless a report of *Incomplete (I)* has been authorized by the instructor. The *I* is restricted to students doing satisfactory work in the class who, because of extenuating circumstances, are unable to complete the work of the course. The *I* is limited to assigned work during the final sixth of the term. If a course is reported as *Incomplete*, a student is not prevented from registering for another course for which the unfinished course is a prerequisite. Work reported as *Incomplete* must be completed within six months from the time at which the report was made. If the work reported as *Incomplete* is not made up within six months, it is automatically entered as a *Failure* on the student's record. However, if for sufficient cause an *Incomplete* cannot be removed in six months, request for an extension of the time may be made to the Head of the Department in which the course is offered. The extension, if approved, would be for another six months period unless designated otherwise by the department head.

Some courses continue beyond the normal ending date of the semester or session. In such cases the initial grade reported will be an *RC* which means *Research* or *Course Continued*. Once the extended instructional period is finished the *RC* grade will be replaced with the A-F grade assigned by the instructor.

Regression

Regression occurs when a student enrolls in a course which has content fundamental to another course the student has previously completed successfully. When such regression occurs, the regressive course will be available on an ungraded (credit/no credit) basis only. Credit may be earned, but the hours earned will increase the student's minimum degree hour requirement by an equal amount.

The decision as to whether a course is regressive is made by the department offering the courses. Regression does not occur when the more advanced course was failed. Courses to which this policy applies will be identified in the Schedule of Classes.

Duplication

When two courses have content which is highly similar, e.g., one for general education and one for major/minor requirements, the department offering the course(s) will determine if degree credit can be earned in its course(s). If the department will not allow degree credit in both courses, the credit in the course taken second will increase the student's minimum degree hour requirement by an equal amount. Such second courses may be completed only on an ungraded (credit/no credit) basis.

Marks and Grade Points

The marks A, B, C, D, F (Failed), and I (Incomplete) are used in indicating quality of work. Courses dropped during the first one-sixth of the semester or summer session are not recorded on the student's record. Courses dropped during the second and third one-sixth of the term are indicated on the student's record by W (Withdrawn). For courses dropped during the final one-half of the term (the specific date of the last day to drop a course without an *F* is listed in the Schedule of Classes for each session), F (Failure) shall be reported unless for unusual circumstances specific permission is given to report otherwise.

The time for dropping classes in the summer session is proportionately shorter than in the regular semester. Date deadlines for dropping or adding courses are given in the Schedule of Classes for each semester and the summer session.

Grade points are awarded as follows: For each hour of credit marked A, 4 grade points; A-, 3.67; B+, 3.33; B, 3 grade points; B-, 2.67; C+, 2.33; C, 2 grade points; C-, 1.67; D+, 1.33; D, 1 grade point; D-, 0.67; F, 0 grade points.

Grade Index — In determining a student's cumulative grade index, all course work attempted at this university shall be used as the basis of computation with the following exceptions for students enrolled as undergraduates: If a student repeats successfully a course he or she has previously failed, only the grade received for the successful completion will be included in figuring the cumulative grade point. If a student repeats a course he or she has successfully completed, the grade received the last time the student takes the course will be used in figuring the grade index even though the last grade may be lower than the grade received previously. (The student's transcript of record will show every time the course is taken and the grade earned.) Post-baccalaureate students as undergraduates enrolled for work to meet requirements for certification as elementary or secondary teachers are given the same grade index advantage as is given undergraduate students for courses repeated. This applies only to those courses required for certification. If a graduate student repeats a course, both grades count in computing the index.

Failed Courses — A course that has been failed must be repeated in an on-campus class in order to earn credit for the course. A course that has been failed may not be repeated by correspondence, nor may credit be established by examination for a course which has been taken previously and failed.

Academic Warning, Probation, and Suspension —

Warning: This action is taken by the Office of the Registrar and no entry of this is made on the student's permanent record. A student who is from one to nine points deficient of the number necessary for a 2.00 index at UNI will be warned.

Probation: Any student who is deficient from 10 to fifteen grade points for a 2.00 cumulative index at UNI will be placed on probation. No entry of this is made on the student's permanent record. A student who has been placed on probation may improve his or her record and be removed from probation after reaching a 2.00 cumulative index at UNI or the student may lower his or her record and be subject to suspension.

Suspension: A student who at the end of any semester or summer session is more than fifteen grade points deficient of a 2.00 grade index at UNI or in combination with his or her transfer grade index may be suspended indefinitely or for a predetermined period of time. An entry of this action is made on the student's permanent record.

The university has very generous provisions for a student to drop courses during a semester, or to withdraw from school without serious academic penalties. However, there are times when repeated withdrawals or dropping of courses may raise questions as to the serious intent of the students, and they may be suspended indefinitely or for a predetermined period of time.

Readmission After Suspension: If a student has been suspended for a predetermined period of time and this time was indicated in his or her notice of suspension, the student may return without any formal action by the Committee on Admission and Retention at any time after the suspension period has expired. The student who has been suspended for an indefinite period may be readmitted only after applying for readmission in writing and receiving favorable action on the application from the Committee. Readmission is seldom granted before the student has been out of college at least one academic semester. Applications for readmission may be secured from and filed with the secretary of the Committee in the Office of the Registrar.

Students who are readmitted after suspension are on probation. The Committee will expect an improved quality of academic work and will check the student's progress regularly. If there is no improvement, the next suspension may be permanent.

Dean's List — To be eligible for the Dean's Honor List, which is published each fall and spring semester, a student must have earned a grade-point average of no less than 3.50 while completing at least 12 semester hours in graded work or in field experience in that semester. A Dean's Honor List is not compiled for the summer session, nor does the list include graduate students.

Graduation with Honors — Three grades of honors are awarded to students on graduation from a bachelor's degree curriculum. To receive an honor rating, the student must earn not less than 64 semester hours of credit at this university. Only credit *earned in residence at this university* is considered in making honor awards, except for students graduating with the Bachelor of Liberal Studies degree in which case both residence and non-residence credit taken at this university is considered.

- Those whose grade index on the basis of work at this university is 3.75 or higher are awarded *Highest Honors*.
- Those whose grade index is 3.50 and less than 3.75 are awarded *High Honors*.
- Those whose grade index is 3.25 and less than 3.50 are awarded *Honors*.

The names of students receiving honors are starred in the commencement list with a foot-note explanation.

Credit/No Credit Grading — An undergraduate student having earned twelve semester hours of credit at this university may take courses offered by this institution for which he or she is otherwise eligible for degree credit without grade under the following conditions.

- The course work requirements for a student taking work on an ungraded basis shall be the same as for a student taking the work on a graded basis.
- A grade of C — or higher is required in a course to receive credit on the "Credit/No Credit" option.
- Not more than 22 hours of ungraded course work in addition to courses authorized to be offered only for ungraded credit may be taken toward any bachelor's degree.
- Ungraded credit may not be applied to work required for a major or minor except with the consent of the head of the department in which the course is offered.
- No course taken in the "Credit/No Credit" option may be applied toward meeting a General Education requirement.
- Except for *Field Experience: Interpersonal Interaction Patterns (20:017)*, *Field Experience: Teacher as Change Agent (20:018)*, and for *Student Teaching (28:132 through 28:140)*, ungraded credit may not be used to meet the Common Professional Sequence requirements for the teaching program.
- Course work passed without grade may not be re-taken except by special permission of the Dean of the College in which the course is offered.
- A graded course completed may not be re-taken on an ungraded basis.
- The Credit/No Credit system may not be used with Credit by Examination, Extension, or Correspondence courses.
- Change of registration in a course to or from a non-graded basis may not be made after five class days beyond midterm in a full, academic-year semester, or after the mid-point in the duration of a course taught in a period less than a full, academic-year semester. Only one such change of registration may be made per course.

Open Credit System — This type of undergraduate credit is designed for special projects such as a paper, experiment, work of art, or portfolio assessment of prior learning. The experience upon which the project is based may have been completed at any previous time; however, the student must be registered for credit at this University during the semester "open credit" is requested and open credit will be recorded only after the student has satisfactorily completed 12 hours of credit at this institution.

A project may be submitted any time during the semester up to the last date to add a second half semester course for credit. There is no guarantee of credit prior to or upon submittal of the project. The project is submitted to an ad hoc faculty committee of three faculty members recommended by the student and approved by the head of the academic department or discipline in which the project falls; two faculty members are chosen from the academic area or discipline of the project and one from any area. The student may not submit a project evaluated by one committee to a second committee for reevaluation. The student may resubmit a project to the original committee at the committee's discretion or with its encouragement.

The number of open credit hours assigned to a project will reflect the academic evaluation of the project; credit will be awarded for work judged to be of at least C level quality. No letter grades are given. The range of credit is from 0 to 6 hours per project. A student may apply a maximum of 18 hours of open credit toward graduation requirements. Open credit is normally elective but upon the recommendation of the ad hoc committee it may be approved for requirements in General Education with the approval of the Office of Academic Affairs or for major credit with departmental approval.

Students should contact the Special Programs Office or the appropriate departmental office for advice in submitting projects. Application forms may be secured from the Office of the Registrar.

Cooperative Education

Cooperative Education is an educational program which helps students integrate academic study with work experience. Students in the Co-op Program alternate periods of classroom study with work in business, industry, or a government agency. All Co-op placements are credit bearing.

Participation in the program is optional on the part of the students and selective on the part of the university. Students may qualify for enrollment when all of the following conditions are met:

- A. Student has sophomore, junior, or senior status.
- B. Student has grade point average of 2.5 based upon at least one completed semester of coursework at UNI.
- C. A UNI faculty member approves all arrangements, including projects to be completed, and agrees to supervise and evaluate the students' learning experience.
- D. Approval is obtained from the academic department head granting credit.
- E. Co-op staff can develop a field placement opportunity and arrange for employer's supervision.

Placements can occur during the fall, spring, or summer terms. Students are encouraged to contact the Co-op Office during their freshman year to insure proper class scheduling.

Correspondence Study/Extension Credit

Correspondence study and extension classes comprise the media by which extension credit may be earned. Not more than 32 semester hours of the work required for the bachelor's degree may be met by non-resident credit.

Correspondence Study — Any student who fully meets admission standards will be permitted to enroll for Correspondence Study and may be permitted to continue such study so long as a minimum academic average of 2.00 is maintained by the student. A student may not take by correspondence any course which was previously taken and failed.

As correspondence study courses do not follow the regular semester time schedule, a student may enroll at any time of the year. However, a student must have special permission to enroll in correspondence work while currently enrolled for regular courses on campus if it makes an overload of hours.

The fee for Correspondence Study is \$32 per semester hour and \$13 enrollment fee for both undergraduate and graduate students.

Extension Class Study — Conditions for admission to extension class study are the same as for admission to residence work. There is no distinction between on-campus and off-campus extension credit in meeting university degree requirements. Two-thirds of the credit required on a graduate degree program must be earned in classes taught by UNI staff. The fee for extension credit is \$53 per semester hour for both undergraduate and graduate students.

All fees are subject to change by the Iowa State Board of Regents.

Credit by Examination

Credit in a course may be earned by examination. Credit is earned only if a grade of A or B is received in the examination. A grade of C will release a student from a course requirement, but gives no credit. A grade below C gives neither credit nor release, and is recorded as a failure. Credit earned by examination is recorded on the student record only as Passed, Released, or Failed. The results are not counted in a student's grade index.

Credit may not be established by examination for a course which has been taken previously and failed, nor for a course for which the student does not meet the prerequisite, nor for a course which is a prerequisite to one for which credit has already been earned.

Application for credit by examination is made to the Office of the Registrar, and approved by the Head of the department offering the course and the Dean of the College in which the course is offered.

The department is responsible for giving the examinations, and establishing the requirements for fulfilling the examinations. Credit by examination is open to most courses offered on campus; however, a student should discuss the course requirements with the department head before making application for credit by examination.

Note: For limitations in the total amount of credit earned by examination, see page 29.

Independent Study

Undergraduate students of outstanding ability and achievement may be permitted to earn credit by departmental independent study.

This method of study follows the pattern of an investigation undertaken by a graduate student, although in miniature form. It involves independent thinking, the drawing of conclusions, the summarizing of evidence, or creative work. Whenever possible, the result of the investigation is summarized in a scholarly paper or report, prepared and documented in approved fashion. This report is filed in the department office.

Independent study should not involve work available through regular university courses; neither should it be confused with individual instruction, or the tutorial method. Individual instruction is provided on rare occasions for instruction in a university course not currently being offered.

Application for independent study, including an outline of the proposed project, should be made to the head of the department in which the study is to be done and must have this approval before the project is undertaken. The student's program of independent study will be under the immediate supervision of one or more faculty members. Except for the major in Individual Studies, not more than six hours of credit earned by independent study may be used to meet the requirements of a major.

Independent study may also be taken under the *Individual Studies* program. See page 146 for details.

Visiting (Auditing) Classes

A student may register for classes on an audit (non-credit) basis at the University of Northern Iowa if a space is available in the class. If the addition of the course to be visited (audited) makes the student's total course load hours more than is permitted according to the student's grade point average, the student also must have written approval from the Office of Academic Affairs for an overload of course work.

There is no reduction of fees for auditing (visiting) a course.

Specific information on visiting (auditing) classes may be obtained from the Office of the Registrar. Visitors in the courses are not required to take examinations, take part in class discussions, or complete other work. Audits will not be recorded on the permanent record except by a student request approved by the instructor showing that the student regularly attended the course.

Writing Competency Examination

All entering and transfer students who are candidates for baccalaureate degrees are required to demonstrate competency in writing by passing the Writing Competency Examination. The examination is designed to complement and assist the efforts of the university faculty to ensure that graduates of the university are competent writers.

This examination is given twice each semester. Students register for the examination (62:00X Sec. 80 or 90) during regular class registration periods at the beginning of each semester. The examination may also be given at other times as deemed appropriate by the university. Students should register to take the examination by the end of the sophomore year. Transfer students should register to take the examination their first semester at the university.

Examinations are scored on a pass/no credit basis by trained readers drawn from the Department of English Language and Literature faculty. Students who pass the examination are so informed with their semester grades. Students who do not pass the examination are sent a letter explaining the problems in their writing. They are also advised how to work on these problems in order to pass the examination. Students may repeat the examination after completing appropriate work to improve their writing.

Students with little writing experience in high school and those with known writing problems are urged to enroll in 62:001 Writing: Fundamentals, a course designed to help students prepare for the examination. This course carries three (3) hours of credit. Passing the Writing Competency Examination earns no credit hours, but fulfills a graduation requirement.

College Level Examination Program (CLEP)

The University of Northern Iowa is a participating university in the College Level Examination Program (CLEP). Two types of CLEP examinations are given: General Examinations, which may be applied to general education requirements, and Subject Examinations. CLEP

examinations (both General and Subject) are usually administered once a month throughout the year. Students who plan to attend UNI and who wish further information may write to the Office of Admissions or to Academic Advising Services. (Information is also available in most high school counselors' offices.) Enrolled students interested in earning credit through CLEP should contact Academic Advising Services for information and dates of the examinations. A fee of \$28 is charged for each examination.

Five General Examinations are given: *English Composition with Essay, Humanities, Mathematics, Natural Sciences, and Social Sciences-History*. The test scores are reported with the percentile ranks based on scores achieved by a representative sample of all students at the end of their sophomore year in American colleges and universities. Credit earned by CLEP through the General Examinations (a score of 70 percentile or higher) may be applied to general education requirements at UNI. CLEP tests are usually taken at the time of first registration, and must be completed before registering for general education courses in subject areas to which the tests apply.

Subject Examinations are end-of-course tests developed for widely taught, undergraduate courses. Percentile ranks for the tests compare an individual's knowledge of the subject with scores received by regularly enrolled students who have just completed an equivalent course. The minimum achievement level for credit on the Subject Examinations is the 50th percentile using these norms. A list of subject courses for which CLEP examinations may be taken at UNI is available from the Office of Admissions or Academic Advising Services. Students should expect a delay of at least four weeks between the time of testing and receipt of scores.

For limitations on the total amount of credit earned by examination, including CLEP, which may be applied toward graduation degree requirements, see page 29.

Credit established by CLEP at an institution participating in the Iowa Public College/University CLEP Agreement will be accepted in transfer at full value when terms of the agreement are met.

Students who have established credit by CLEP at a college or university other than an Iowa Regents university or an Iowa area community college participating in the Iowa CLEP agreement, may submit official reports of their scores for consideration. Students whose scores meet UNI standards for awarding credit on the basis of CLEP will receive appropriate credit.

A student may not earn credit by examination in an area in which he or she previously had attempted or completed an equivalent course, a course of similar level, or one that is more advanced in content level. A course in which a student was enrolled until such time that a "W" for a grade was earned is considered to be an attempted course.

A fee is charged for each General or Subject Examination. Fee payment, registration procedures, and test date information are available by contacting Academic Advising Services, Baker 161, UNI (telephone 319-273-6023).

Advanced Placement Program

The University of Northern Iowa participates in the Advanced Placement Program of the College Entrance Examination Board. Through enrollment in special courses in a participating high school, a qualified high school senior may take achievement examinations in one or more academic subjects at the college level. UNI grants college credits in art, biology, chemistry, English, foreign languages, history, mathematics, music, and physics to students who pass examinations with scores of 3, 4 or 5. Details of this program may be obtained from the Director of Admissions, UNI. (*For limitations in the total amount of credit earned by examination, see page 29.*)

Graduate Credit for Undergraduate Students

Seniors at this university who are within fourteen semester hours of graduation and who wish to take graduate study for graduate credit must file an application for admission as a graduate student. Exception to the limit is rarely made and the student must have special permission from the Dean of the Graduate College.

Regents Universities Student Exchange Program

University of Northern Iowa students may take courses at either of the other two Regents universities for UNI resident credit. Regular, degree-bound students in good standing at any of the three Regents universities may attend another Regents university for a maximum of two semesters (three quarters), and the credits earned at the other university will be counted as resident credit at their home institution. Approval for participation and credit in the exchange program must be obtained well in advance of registration since the department head must approve the acceptance of such credits if these are to apply on the major, and to insure complete processing of the application between the cooperating universities within specified dates for enrollment.

Detailed information and application forms for the exchange program are available from the Office of the Registrar, UNI.

Workshop and Study Tours

From time to time, and especially during the summer session, opportunities are offered for earning credit under the workshop plan. Workshops provide residence credit but a maximum of 6 semester hours may be applied toward graduation.

Occasionally departments of the university may arrange extensive study tours here and abroad for credit. These trips are open to graduate and undergraduate students. Plans for this type of study and the number of hours of credit which may be earned are announced through university publications. During recent summers several study tours were conducted by departments of the university. (See page 18 for details.)

Program Certificates

The University of Northern Iowa makes available, in addition to traditional programs, the opportunity for students to earn Program Certificates. Program Certificates provide an alternative to programs which lead to a degree, a major, or a minor; they certify that an individual has completed a program approved by the university.

Program certificates now available include:

- Bilingual Program Certificate: in Spanish, Level I
- Bilingual Program Certificate in Spanish, Level II
- Bilingual Program Certificate in French, Level I
- Bilingual Program Certificate in French, Level II
- Bilingual Program Certificate in German, Level I
- Bilingual Program Certificate in German, Level II
- Certificate in Cartography
- Certificate for Teachers in Bilingual Areas (Spanish)
- Certificate in Translation and Interpretation (all languages)
- Certificate in International Commerce
- Latin American Studies (Modern Languages)
- Gerontology Certificate
- Music in Special Education Certificate
- Schooling and Childlife Certificate
- School Staff Group Leadership Certificate
- Small Town — Non-Urban Education Certificate

Educational Alternatives Certificate

School-Community Relations Certificate

Social Foundations of Education Certificate

Training and Development in Business Certificate

The interested student should consult the appropriate department. The Registrar's Office serves as the centralized registry for this program.

Student Conduct

The University of Northern Iowa expects all students to observe university regulations and the city, state and federal laws, and to respect fully the rights of others. The *Student Policy Handbook* contains more specific information concerning student conduct and disciplinary action.

Student Records

In the maintenance of student records, and in permitting access to those records or the release of information contained in those records, the University of Northern Iowa complies with the laws of the United States and the State of Iowa.

University policies relative to student records are contained in the *Student Policy Handbook*. The Family Educational Rights and Privacy Act and the regulations required by this act may be reviewed in the Office of the Registrar, Room 243, Gilchrist Hall.

Student Persistence

Iowa Regents universities have conducted studies, at five year intervals, of student persistence/attrition. A summary of the findings of the most recent study may be secured from the Office of the Registrar.

Nondiscrimination Policy of the University of Northern Iowa

The University of Northern Iowa has adopted a policy of non-discrimination and affirmative action in accordance with public policy and law, including executive orders #11246 and #11375, revised order #4, Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, Age Discrimination Act of 1975, Vietnam Era Veterans' Readjustment Act of 1974, and other relevant legislation and state and federal executive orders.

The university is committed to a policy of equal opportunity without regard to race, religion, national origin, age, sex, or handicaps, and to a policy of affirmative action for protected classes.

This policy must be implemented throughout the university and is the responsibility of all employees of the university, including both supervisory and nonsupervisory personnel. It involves all students and student activities.

The University of Northern Iowa upholds its long-standing commitment to providing equal accessibility to programs and facilities for all segments of society — this includes all protected classes, including the handicapped. In the last several years the university has reviewed its entire program for its accessibility to qualified persons and is prepared to make necessary adjustments to assure equal accessibility for the handicapped to all university programs.

In an endeavor to achieve these goals, university buildings and grounds have been modified to be accessible to people with physical handicaps. Further requests for reasonable modifications which are requested to accommodate the needs of any individual student may be made to the Affirmative Action Compliance Officer, Room 203, Gilchrist Hall (Ext. 2846). It is the intention and desire of the university to make every effort to provide such modification on a timely basis.

Curricula

The University of Northern Iowa offers degrees at both the undergraduate and graduate levels. The graduate program is given in detail on pages 148 to 184. At the undergraduate level the University of Northern Iowa offers four traditional baccalaureate degrees: the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music, and the Bachelor of Technology. The external degree of Bachelor of Liberal Studies is also offered by UNI, and details of this unique degree program are given on pages 42 and 46. Major goals in the programs leading to these degrees are the advancement of humane learning and the preparation of all students to cope intelligently, effectively, and reasonably with the complex and changing conditions of life in modern society. To attain these goals students are expected to make significant progress while at the university toward:

1. understanding themselves and the society in which they live,
2. developing the ability to read, write, and speak their own language well and to appreciate its literature.
3. gaining an acquaintance with the literature of another language and the culture of its people, preferably in the original but certainly through the study of translations,
4. securing a thorough grounding in the history and cultural traditions of the modern world with a special sympathetic understanding for the economic, social, and political problems of our time,
5. acquiring an understanding of the principles and methods of the natural sciences and mathematics and the part they play in modern society,
6. developing the ability to perceive the values of the arts and derive an enjoyment from them.
7. acquiring a knowledge of how to care for their own health and physical environment and to take an intelligent interest in the health and welfare of the community in which they live.
8. growing in the desire to secure knowledge.

To achieve these ends students are obliged to take a variety of courses drawn from among the arts, humanities, philosophy, mathematics and language, and from among the biological, physical, and social sciences. Concentration in a major field enables students to engage in intensive study, to think for themselves, and to exercise discriminating judgment. It prepares the student for more advanced work if he or she decides to go on to graduate school, or for immediate employment. This emphasis on the academic program is not to exclude the contributions made by other parts of the university life to the substantial development of a student's personality — social and athletic activities, public speaking and dramatic arts, music, art, public affairs, or other programs.

The desired result of these degree programs is not an individual who conforms to society as it is or sees his or her own vocation within the narrow confines of the day-to-day occupation, but rather a person enriched in mind and spirit and so stimulated that this person will seek with eagerness to contribute to the benefit of the world in which he or she lives. Such a program is desirable for all students whatever their future professions may be.

For those who plan to become teachers, additional work is required in professional education. This work seeks to enhance the student's interest in teaching, to instill loyalty toward the profession, and to encourage the desire for continuous professional growth. The student learns the skills, techniques, and understanding necessary to good teaching, studying the recent knowledge concerning the physical and mental growth of the child, the ways children learn, the guidance of that learning to its fullest potentialities in each child. The



student explores the mutual relationships and responsibilities of the school, community, and the teacher.

The prospective teacher must also spend a significant part of his or her time in the area of learning chosen for concentration. The student's mastery of the subject matter of this area, its closely related fields, and the skills to present it effectively are essential aspects of successful teaching.

The teaching program requires more hours to complete than most of the other programs in order to include the necessary professional work and to approximate, as far as possible in a four-year period, the other major goals previously listed. Students on the teaching program especially are encouraged to continue their education beyond the bachelor's degree.

The University of Northern Iowa offers both undergraduate and graduate curricula.

I. Undergraduate Curricula

Bachelor of Arts Degree

Two programs leading to the Bachelor of Arts degree are available.

A. Bachelor of Arts — Teaching Program — 130 semester hours.

On this program students are prepared as:

1. Secondary teachers of art, business education, geography, English, foreign languages, home economics and vocational home economics, industrial arts, mathematics, music, physical education, science, social science subjects (economics, history, etc.), and speech.
2. Special teachers of art, industrial arts, music, physical education, and speech correction.
3. Early childhood and elementary teachers, kindergarten through sixth grade.
4. Middle School/Junior High School teachers in various areas of instruction.

B. Bachelor of Arts — 124 semester hours.

On this program students are prepared in the following areas:

1. Liberal Arts — Art, English, foreign language, mathematics, music, psychology, speech, social science, and science.
2. Vocational — Business, home economics, industrial arts, and physical education.
3. Program for Registered Nurses

A student certified or licensed as a registered nurse (R.N.) may be recommended for a Bachelor of Arts degree with a major in General Studies in accordance with the following provisions:

- a. A student who has taken the work required for certification or licensure, including the successful completion of required agency examinations, will have the equivalent of up to 45 semester hours accepted for transfer to apply on the bachelor's degree. Such work may have been earned in a two-year associate degree program or in an approved hospital diploma program.

These hours of transfer work may be affected by a general university requirement that all work following completion of the first 65 semester hours must be taken at a four-year institution. Thus, a student who has earned more than 20 semester hours of college credit before or while completing requirements for R.N. certification may not be able to use all of the 45 semester hours for graduation requirements. Such individuals should consult the Director of Admissions concerning the application of this requirement in his or her situation.

- b. Ten of the transfer hours of work received for R.N. certification are applied to General Education requirements in the areas of biology, chemistry, interpersonal relationships, and communications. Specifically, the 10 hours would be dispersed in the following way:

Category 1: Principles of the Physical Universe — 2 hrs.

Category 2: Life and Its Interrelationships — 4 hrs.

Category 3: Human Identity and Relationships — 2 hrs.

Category 9: Communicative Processes — 2 hrs.

The student will be held to complete the 40-hour General Education requirement for a minimum of 30 additional semester hours of approved General Education courses with at least two or more hours from each of the remaining eight categories.

- c. The student shall complete a minimum of 15 hours of 100-level courses from each of two of the five principal academic units* of instruction. (*See pages 7 and 8 for academic units list.) The student's program will be planned in consultation with the faculty adviser and approved by the adviser. Areas for such coordinated programs might include biology, business, education, health, home economics, physical education, psychology, social work, sociology.
- d. As an alternative to item "c," the student may complete the requirements for a major offered by any department and graduate with a Bachelor of Arts in the chosen major.

- e. A student may not earn duplicate credit for courses taken at another institution and judged to be equivalent.

- f. The student shall earn enough credit in elective courses to have a total of 124 hours of academic credit.

- g. This program is under the jurisdiction and general supervision of the Dean of the College of Natural Sciences. Students entering this program will confer with the Dean on the appointment of an adviser. Such advisers may be faculty members from any of the undergraduate colleges.

This degree program is not recommended for students intending to work in nursing education at the collegiate level, in such areas as public health, or psychiatric nursing, nor those for whom the primary intention is graduate work in nursing.

4. Joint Programs

Students interested in one of the following professional programs may complete the basic work on the University of Northern Iowa campus and transfer to UNI a year's credit from the professional school to complete the requirements for a Bachelor of Arts degree at UNI:

Dentistry
Medicine
Medical Technology
Physical Therapy

A student shall complete at UNI all the requirements in General Education (40 semester hours) and the requirements for a major in Science and have a total of at least 96 semester hours at UNI. The professional courses transferred will bring the total hours to at least 124 semester hours. Credit is accepted only from professional schools which are fully accredited.

The student must know the requirements for entrance to the professional school so as to be able to take, at the University of Northern Iowa, the work required for admission while at the same time meeting UNI degree requirements. The student will work with a pre-professional adviser who will help in the selection of proper courses.

- a. Acceptance of credit from professional schools of dentistry, medicine, osteopathy, and podiatry toward meeting part of degree requirements:

A student who has completed three years or more of college work with a minimum of 96 semester hours, of which at least the last 30 hours of work was completed at the University of Northern Iowa before admission to an accredited professional college, may use professional credit to satisfy the remaining hours required for the baccalaureate degree at the University of Northern Iowa. The student shall have completed all of the specific requirements for the degree as well as the requirements of an appropriate major at this university.

- b. Acceptance of credit from a professional school of Medical Technology or Physical Therapy toward meeting part of degree requirements.

A student who has completed three or more years of college or university work with a minimum of 96 semester hours, of which at least the last 30 hours of work was completed at the University of Northern Iowa

before admission to an approved school of Medical Technology or Physical Therapy, may use professional credit to satisfy the remaining hours required for the baccalaureate degree at the University of Northern Iowa. The student shall have completed all of the specific requirements for the degree, as well as the requirements of an appropriate major at this university.

C. Other Programs

1. Pre-professional — Suggested programs are available for those planning to transfer into Medicine, Dentistry, Osteopathy, Podiatry, Law, and Engineering. These may be requested in advance from the Admissions Office.

2. Cooperative Programs —

- a. Two-Year Cooperative Nursing Program with the University of Iowa. Through a cooperative arrangement between the University of Northern Iowa and the College of Nursing at the University of Iowa, students may enroll at the University of Northern Iowa for the first two years of the four-year Bachelor of Science in Nursing program. The program is completed at the University of Iowa and the degree awarded by that institution. A carefully planned sequence of courses, covering two academic years, has been developed for students who find it advantageous to begin the four-year baccalaureate program at UNI. Students who complete the two-year sequence with at least a 2.20 grade point average on all college work undertaken may apply for admission to the College of Nursing, University of Iowa, for one summer session and two academic years of study in the nursing major. Upon completion of the major, graduates may write the examination for Registered Nurse licensure.

At the University of Northern Iowa students complete two years of basic studies. These courses include work in general education along with introductory and basic science courses. Program details are available from the Dean of the College of Natural Sciences.

During the first semester of the sophomore year students who have earned the required 2.20 grade point average will submit an application to the University of Iowa for admission to the College of Nursing. The Admissions Committee of the College of Nursing reserves the right to select those students for the summer session course in Foundations of Nursing who are deemed most likely to succeed in the nursing major. Tentative admission statements will be given to qualified students by April 1, with final admission statements reserved until sophomore grades are certified by the University of Northern Iowa.

- b. Freshman Academic Program with the Allen Memorial School of Nursing. The University of Northern Iowa cooperates with Allen Memorial School of Nursing, Waterloo, Iowa, to offer the freshman year academic work. Admission to the program is a joint action of the School of Nursing and the university. Applications should be made to the School of Nursing.
- c. Three-year Program in Medical Technology. The University of Northern Iowa cooperates with Allen Memorial School of Medical Technology and Schoitz School of Medical Technology, both located in Waterloo, Iowa, to offer the first three years of work; the schools

of medical technology offer the fourth year. Applications should be made to the Registrar of the university and a copy of the combined program requested.

- d. Associate of Applied Science in Dental Hygiene at Hawkeye Institute of Technology. The University of Northern Iowa provides the required arts and science courses on its campus for this program. Applications should be made to Hawkeye Institute of Technology.
- e. Associate of Applied Science in Nursing at Hawkeye Institute of Technology. The University of Northern Iowa provides the required arts and science courses on its campus for this program. Applications should be made to Hawkeye Institute of Technology.
- f. Five-year Program in Hospital and Health Administration. The University of Northern Iowa cooperates with the University of Iowa to offer the first three years of work; the University of Iowa offers the fourth and fifth years. After satisfactory completion of the first year of the program at the University of Iowa, the student receives the Bachelor of Arts degree from the University of Northern Iowa, and completion of the second year at the University of Iowa leads to the Master of Arts degree in Hospital and Health Administration. Application for the initial phase of the program may be made to the Director of Admissions at the University of Northern Iowa and a copy of the combined program requested.

A student who expects to transfer to another institution should declare his or her special interest at the time of admission. This student will be assigned to an adviser who is familiar with the type of program being sought. Before seeing his or her adviser for the first time, the student should secure a current copy of the catalog of the school to which the transfer is planned and know its requirements thoroughly. The program of a student who remains more than one year at the University of Northern Iowa must be cleared with the Coordinator of Academic Advising at the beginning of the sophomore year.

3. Army Reserve Officers' Training Corps —

Four, three, and two-year Military Science programs are available for those students desiring to obtain a U.S. Army commission as a second lieutenant at graduation. The ROTC *Basic Course* affords students the opportunity to study the military organization without obligation for military service. The ROTC *Advanced Course*, however, does entail a commitment for further military service. Although the AROTC curriculum normally spans four years, it can be completed in as few as two years by qualified students with departmental approval. Additional information on the required program of courses is listed under the Department of Military Science (see page 111) and further information may be obtained by contacting the department office, Baker Hall, UNI.

Bachelor of Fine Arts Degree

Programs available under this degree are a major in art, offered by the Department of Art, and a major in music theatre which is an interdisciplinary major combining courses from the School of Music and Speech-Theatre of the Department of Communication and Theatre Arts. A minimum total of 130 semester hours is required for the degree. The art major is designed to provide professional career training in all studio areas and requires a minimum of 75 semester

hours of work in art. Music theatre graduates are prepared for professional careers in the music theatre field and, upon completion of the requirements for the music education major under the Bachelor of Music degree, could qualify for directorial positions in the public schools.

Bachelor of Music Degree

Majors on this degree program have the choice of an educational major or two professional majors: each requires a total of 130 semester hours for the degree. The music education major carries certification to teach music in grades K-12. The performance major with emphases in voice, piano, organ and band-orchestral instruments, and the theory-composition major are professional programs designed to prepare students for careers as artist-performers or composers, or for entrance to graduate schools where further excellence in a performance area might be pursued. Students earning the Bachelor of Music degree are prepared as performers, college teachers, and in all areas where a high degree of music or performing skill is required.

Bachelor of Technology

This degree has five program areas that provide a choice of majors: Vocational Technical Education; Industrial Technology (with concentrations in Mechanical Design/Drafting and Manufacturing Technology); Construction Technology; or Power and Energy Technology. The first area leads to a degree with certification to teach.

- A. Vocational Technical Education major
— 130 hours.

This major is designed to prepare teachers for secondary and post-secondary technical programs, and also requires recent and significant technical work experience in industry in the major area. The concentrations may be: Construction Technology; Graphic Arts Technology; Manufacturing Technology; Mechanical Design/Drafting; Power and Energy Technology; or a technical area with occupational competence.

- B. Industrial Technology major
— 127 hours.

This program has two areas of concentration for this degree: Manufacturing Technology and Mechanical Design/Drafting Technology. This major is designed to prepare persons for technical managerial or supervisory positions in industrial firms or businesses. Graduates from these programs are employed in industry areas such as: design and development; engineering; production supervision; field service and product utilization; safety; quality control; training; technical representation; technical sales and distribution; or personnel.

- C. Construction Technology major
— 130 hours.

This major is designed to prepare individuals for positions in the construction industry such as project managers, project coordinators, project estimators, material and equipment distributors, labor-management relations, personnel, inspectors, researchers, technical specification writers, sales managers, manufacturers' representatives, maintenance supervisors, construction supervisors and quality control specialists.

- D. Power and Energy Technology major
— 130 hours.

This major is designed to prepare students for industrial supervisory and leadership positions that are associated with the field of electronics and mechanical engineering. Graduates from the program may be employed in one of the following divisions of industry: research and development, production

and manufacturing, field service and product utilization, sales and distribution, training, technical representation, technical writing, and industrial maintenance.

Bachelor of Liberal Studies

In addition to the preceding conventional degree programs, the University of Northern Iowa offers the Bachelor of Liberal Studies degree which was approved July 1977 by the Iowa State Board of Regents. The B.L.S. is an external degree that provides baccalaureate educational opportunities to those who cannot attend college as full-time, on-campus students. The degree program is the result of a cooperative effort by the three Iowa Regents universities, and each of the universities offers the degree with the same curriculum requirements.

A total of 124 semester hours (186 quarter hours), including transferable credit earned, is required for graduation. Formal admission to the program requires an Associate of Arts or an Associate of Science degree from an accredited two-year college, or at least 62 semester hours (93 quarter hours) of college work acceptable for credit toward graduation at one of the three Iowa Regents universities with a grade average of at least 2.00.

Change of Degree Program

Students who change from one degree program to the other will be held for all specific requirements of the program on which they expect to graduate. There will be little difficulty in making such a change if it is made not later than the beginning of the junior year. However, if the change is made later than that, there is no assurance that the student will be able to complete the work required for graduation within the usual four-year period.

II. Graduate Curricula

The University of Northern Iowa offers eight graduate degrees:

- A. Master of Arts in Education — a minimum of 30 semester hours.
- B. Master of Arts — a minimum of 30 semester hours.
- C. Master of Business Administration — a minimum of 30 semester hours.
- D. Master of Music — minimum of 30 semester hours.
- E. Specialist in Education — minimum of 30 semester hours beyond the master's degree.
- F. Specialist — minimum of 30 semester hours beyond the master's degree.
- G. Doctor of Industrial Technology — minimum of 64 semester hours beyond the master's degree.
- H. Doctor of Education — minimum of 60 semester hours beyond the master's degree.

General Education Program

All candidates for the baccalaureate degrees on any curriculum are required to complete the designated program in General Education which, at UNI, consists of a minimum of 40 semester hours selected from courses structured in the 12 categories listed below. A General Education course which is taken for major credit shall satisfy the requirement of taking a course in that specific category where the course is fixed in the General Education program, but it may not be counted toward the required 40 hours.

Because of the flexibility of the program and the wide choice in courses available to the student, General Education requirements must be satisfied through class enrollment (or credit by examination). (General Education requirements may not be satisfied by demonstration of competency or release — without credit — by examination.) Specific courses which may be taken to fulfill the General Education requirements are listed in the Schedule of Classes for each semester and summer session. The student is advised to complete the General Education program as early as possible in his or her university career, preferably by the end of the sophomore year.

To fulfill the General Education program, two or more credit hours are required in each of the 12 categories. A minimum of two hours in physical activity courses is required in Category 12 (Physical Education and Health). No more than three courses with the same departmental prefix number (e.g., 50:xxx) may be counted as meeting the General Education requirement for any given student; however, this rule does not apply to the one-hour physical education activity courses.

The selection of one course from each of the first eleven categories and two from Category 12 does not total 40 hours. This will require taking additional course(s) from one or more categories with the following limitations: no more than 8 semester hours may be counted toward General Education in any one of the first eleven categories, and no more than 4 semester hours may be counted in the category "Physical Education and Health."

General Education Categories

1. Principles of the Physical Universe
2. Life and Its Interrelationships
3. Human Identity and Relationships
4. Societies: Institutions, Systems, Ideologies
5. Sources of Western Civilization
6. Civilization and Culture of the United States
7. Other Cultural and Sub-Cultural Traditions
8. Environment, Technology, and the Future
9. Communicative Processes
10. Mathematical and Scientific Processes
11. Artistic Processes
12. Physical Education and Health

Bachelor of Arts Degree Curricula

Bachelor of Arts — Teaching Program

All candidates on this program will choose one of the following patterns not later than the beginning of the sophomore year. Graduation from a teaching program requires credit in American history or American government, and in Human Relations (01:070).

- A. Preparation for teaching in the secondary school or in special subjects.

	Semester Hours
General education	Minimum 40
Common professional sequence	23
Major, minor, electives	67
	<hr/> 130

- B. Preparation for teaching in middle school/junior high school (grades 4 through 9)

	Semester Hours
General education	Minimum 40
Common professional sequence	23
Major requirements	14
Professional semester	17
Subject field and electives	36
	<hr/> 130

- C. Preparation for teaching in the elementary school (kindergarten and grades 1-6)

	Semester Hours
General education	Minimum 40
Common professional sequence	23
Major requirements	13-15
Professional semester	17
Other requirements and electives	36-38
	<hr/> 130

- D. Preparation for teaching in early childhood education (nursery school and kindergarten)

	Semester Hours
General education	Minimum 40
Common professional sequence	23
Major requirements	12
Professional semester	17
Other requirements and electives	38
	<hr/> 130

The Common Professional Sequence

All candidates for the Bachelor of Arts — Teaching Program are required to take the courses in the common professional sequence as outlined below, and in addition a minimum of one departmental methods course. The Department of Education and Psychology and Foundations must be consulted at the time of registration for beginning the common professional sequence.

Level I	Semester Hours
20:017 Field Experience: Exploring Teaching	1
20:030 Dynamics of Human Development	3

Level II	
20:018 Teacher as Change Agent (field experience)	1
20:040 Nature and Conditions of Learning	3
20:050 Classroom Evaluation Instruments	3

Level II (Before enrolling in Level II, the student must be officially admitted to the Teacher Education Program.)

20:018 Teacher as Change Agent (field experience)	1
20:040 Nature and Conditions of Learning	3
25:050 Classroom Evaluation Instruments	3

Level III

26:119 Schools and American Society	4
---	---

Student Teaching —

28:1xx (Course number denotes area in which experience is gained: 28:132, 134, 135, 136, 137, 138, 139)	8
	23

Application for Admission to the Teacher Education Program must be made before enrolling in the Level II Professional Sequence courses. Application is usually made as a part of the student's declaration of a teacher education major. The student must pass such tests as may be prescribed by the Teacher Education Coordinating Council (TECC). To be approved, a student must have earned at least 24 semester hours of credit and must have at least a 2.40 grade index in all course work. TECC may grant provisional approval for students in exceptional cases but may not grant full approval until all standards have been met.

A student may, at the time of admission to the university, declare an intent to enter a teaching program and be assigned a teaching advisor from the first enrollment. The university must give special consideration to scholarship, health, character, personality, and quality of potential leadership of an applicant for a teaching curriculum.

A student must have a 2.40 GPA in her/his academic department or departmental approval; 2.40 GPA in sequence and methods course(s), not lower than a 2.00 in methods course(s); 2.40 in all work completed before student teaching; completion of all required methods courses (at least two if department requires more than two).

More detailed information regarding admission and retention may be found in the brochure entitled *Teacher Education*, a statement of policies, requirements, and procedures for admission to and retention in teacher education at the University of Northern Iowa, which each student should obtain from the office of the Registrar.

Directed Experiences — At the University of Northern Iowa directed experiences in teaching and the observation of teaching are an integral part of the teacher-education curriculum. The emphasis on experimentation and creative approaches gives the student insight into turning theory into practice. The professional laboratory experiences include video-taped and directed observation as well as field experience and participation, culminating in the actual period of student teaching in the senior year.

Video-taped and directed observation give the student an opportunity to see the teaching-learning operation without becoming involved in the on-going activity itself. In the field experience and participation experiences, the student takes an active part under direction and guidance in the teaching-learning situation or other community activities.

Student involvement in all of the directed experiences in teacher education is vital to the preparation of the prospective teacher. Observation and participation experiences are provided through specific courses in the teacher education program. These experiences give the student the background needed to make professional coursework and student teaching more meaningful.

Student teaching is a period of guided teaching varying in length from one-half semester to a full semester. During this time the

student assumes increasing responsibility for the teaching-learning activities in the classroom. The student receives eight (8), twelve (12), or sixteen (16) hours of credit and is evaluated on a credit/no-credit/withdrawal system. (See page 35.) Interinstitutional student teachers who enroll at UNI, including those on the Regents Universities Student Exchange Program, may be evaluated on a graded basis (e.g., A, B, C, D, F) upon written request, at the time of application, from the Registrar of the home institution.

Majors and Minors — Secondary School Teaching

Each student preparing to teach in the secondary school or in a special subject will choose a major not later than the beginning of the sophomore year. The student will also select at least one minor if a minor requirement is indicated under the description of the major chosen. Even if not required, a student may select a second major or one or more minors.

The majors and minors will be chosen from the fields listed below. The specific requirements of each will be found at the beginning of the appropriate department's section of the chapter entitled Courses of Instruction.

Majors

Art	Industrial Arts Education
Asian Studies	Mathematics
Biology	Physical Education
Business Education	Physics
Chemistry	Political Science
Communication and Theatre Arts	Psychology
Earth Science	Safety Education
Economics	Science
English	Science: Environmental/ Conservation Education
French	Emphasis
General Communication and Theatre Arts	Social Science
Geography	Sociology
German	Spanish
Health Education	Speech-Language Pathology
History	TESOL/Modern Languages
Home Economics	Vocational Home Economics

Minors

Art	History
Biology	Industrial Arts
Business Education	Journalism
Chemistry	Library Science — Elementary/Secondary
Coaching	Mathematics
Communication and Theatre Arts	Music
Dance	Physical Education — Elementary Teaching
Earth Science	Physics
Economics	Political Science
Education of the Handicapped — Secondary Level	Psychology
English	Russian
French	Safety Education
Geography	Sociology
German	Spanish
Health Education	

To be approved for teaching in a major or minor area a student must make satisfactory grades in that area, must secure approval of the department, and pass such tests as the area department may require. A student may be held for additional work if he fails to demonstrate competence.

Majors in Early Childhood Education and Elementary Education

These majors are given in specific detail under the Department of Curriculum and Instruction in the section entitled Courses of Instruction, pp. 67 and 68.

Major in Middle School/Junior High School Education

Complete program requirements for the Major in Middle School/Junior High School Education are given on page under the listings of the Department of Curriculum and Instruction. Specific course patterns in each subject field offered for the Middle School/Junior High School Education Major may be found with the various department listings, pages 79 to 135.

Bachelor of Arts — Liberal and Vocational Arts

All candidates on this program will complete the following pattern:

	Semester Hours
General Education	Minimum 40
Major, Minor, Foreign Language, Electives	84
	Minimum 124

Not later than the beginning of the sophomore year each student enrolled on this program will choose one major from the list below. A knowledge of a foreign language is required or recommended for several majors. Specific information regarding the foreign language requirements will be found with the departmental listings. It is recommended that the student include in his or her electives a course in the literature of some language or languages other than English (in translation if not in the original).

Majors and Minors

Specific requirements for the various majors and minors will be found with the departmental listings.

Majors

Accounting	General Studies for Registered
Administrative Management	Nurses
American Studies	Geography
Anthropology	Geology
Art	German
Biology X and Y	History
Biotechnology	Home Economics — Design
Chemistry A and B	and Human Environment
Chemistry-Marketing	Home Economics — Dietetics
Communication and Theatre	Home Economics — Family
Arts	Services
Communications/Public	Home Economics — Clothing
Relations	and Textiles
Communications/Radio-TV	Home Economics in Business
Community Health Education	Home Economics in Business
Community Recreation	— Foods and Nutrition
Computer Science	Humanities
Computer Information	Individual Studies
Systems	Industry
Earth Science	Latin American Studies
Economics	Management
English	Marketing
English Linguistics and	Mathematics
Modern Languages	Music
English Linguistics	Natural History Interpretation
French	Philosophy
General Studies	Philosophy and Religion

Physics A, B and C
Political Science
Psychology
Public Administration
Religion
Russian Area Studies
Science
Science: Environmental
Planning

Social Work
Sociology
Spanish
Teaching English to Speakers
of Other Languages
(TESOL)
Theatre Arts
Therapeutic Recreation

Minors

Anthropology
Art
Asian Studies
Astronomy
Athletic Training
Audio Recording Technology
Biology
Business — Accounting
Business — Management
Business Communication
Chemistry
Communication and Theatre
Arts
Community Health Education
Comparative Literature
Computer Science
Criminology and Corrections
Dance
Earth Science
Economics
Educational Media
English
English Linguistics
Environmental Perceptions
Family Life Education
French
Geography
German
History
Home Economics
Humanities
Industry
Jazz Studies
Journalism
Marketing
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Religion
Russian
Sociology
Spanish
Teaching English to Speakers
of Other Languages
(TESOL)
Women's Studies

Bachelor of Fine Arts Degree Curricula

Candidates for the Bachelor of Fine Arts degree will complete the following pattern of work:

	Semester Hours
General Education	40
Major requirements	75-77
General electives	13-15
	130

The Bachelor of Fine Arts degree is a highly specialized program which provides strong emphasis on work in professional career training. Two majors are available under this degree, a major in Art and a major in Music Theatre.

The *Art major* offered on the B.F.A. requires a minimum of 75 semester hours in art. Normally this major does not provide for certification to teach. Additional hours are necessary to meet certification requirements.

An exhibition which demonstrates competency is required during the senior year of each candidate for the Art major under the B.F.A. degree. (See Department of Art, page 50, for additional information.)

The *Music Theatre major* is an interdisciplinary program which is offered by the School of Music. Requirements for the major are:

Music core:	53 hours
Theatre core:	24 hours
Total:	77 hours

Participation in a performance organization and/or opera/music theatre classes is required of all Music Theatre majors every semester in residence. A basic knowledge of a foreign language is recommended.

The approval of the faculty, undergraduate coordinator in music, and the director of the School of Music must be secured before a student is admitted formally to this degree program. Students pursuing a music curriculum should undertake a common core of required courses during the freshman year. During the second semester of the freshman year an extensive evaluation of each music major will be conducted. Transfer students will be admitted conditionally to the department, and after one semester in residence, may be admitted formally to a program of study.

Upon completion of specific requirements of the Music Education major under the Bachelor of Music degree, the student could qualify for certification to teach. (See School of Music, page 118, for additional information.)

Bachelor of Music Degree Curricula

All candidates for the Bachelor of Music degree will complete a pattern similar to the following:

	Semester Hours
General Education	40
Music requirements (applied, theory, history and literature, conducting, ensembles, recital, composition, electives)	65-80
General electives	10-25
	130

The following majors are offered on this degree program:

- Music Education (Teaching) — 65 hours
- Performance (Voice, Piano, Organ, Band-
Orchestral Instruments) — 80 hours
- Theory-Composition — 80 hours

If certification to teach is desired, the student must complete the Common Professional Sequence (see page 43) and a Music Methods emphasis (see Music Education major, page 119). The Music Education major carries certification to teach for grades K-12. (A course in Human Relations and a course in American history or American Government are also required for certification to teach.)

The approval of the faculty, undergraduate coordinator of music, and the director of the School of Music must be secured before a student is admitted formally to this degree program. All students who have been admitted to the department and wish to pursue a music major curriculum should undertake a common core of required courses during the freshman year. During the second semester of the freshman year an extensive evaluation of each music major will be conducted. Transfer students will be admitted conditionally to the department, and after one semester in residence, may be admitted formally to a program of study.

Participation in a performance organization such as band, chorus, orchestra, music theatre, and other ensembles, is required of all degree students every semester in residence. It is recommended that students who major in voice, Music Performance, and Theory-Composition complete at least 10 semester hours in a foreign language.

(See the School of Music, page 118, for additional information.)

Bachelor of Technology Degree Curricula

The requirements for each area are designed specifically for that particular program and are shown in detail in the statement of the major under the departmental listings in the section entitled Courses of Instruction (pages 98 to 101). Majors offered under this degree are:

- Construction Technology
- Industrial Technology
- Power and Energy Technology
- Vocational Technical Education

The General Education program of 40 semester hours is required on all majors under this degree.

Teaching Program

The teaching program requires the completion of a minimum of 130 semester hours. All candidates in the teacher preparation program for the Bachelor of Technology will choose the appropriate concentration to total 36 semester hours no later than the beginning of the sophomore year.

This program is designed to prepare teachers for trade, industrial and technical areas at secondary and postsecondary schools and institutions with vocational and technical programs.

Technology Program

Technology programs require the completion of 127 to 130 semester hours which include the 40 semester hours of General Education. Candidates on technology programs will complete one of two patterns for:

- A. Industrial Technology — 127 hours
- B. Construction Technology — 130 hours
- C. Power and Energy Technology — 130 hours

Bachelor of Liberal Studies Degree Curricula

The Bachelor of Liberal Studies is an external degree made available through the cooperative efforts of the three Iowa Regents universities, the University of Northern Iowa, Iowa State University, and the University of Iowa. Under the B.L.S., baccalaureate educational opportunities are provided to those who cannot attend college as full-time, on-campus students. Each of the three universities offers the degree with the same curriculum requirements. The program at the University of Northern Iowa is under the supervision of the Dean of Continuing Education and Special Programs.

Admission to the Program: As a basis for further study leading to the baccalaureate degree, each student entering the program must have earned either:

- 1) an Associate of Arts or an Associate of Science degree from an accredited, two-year college, or
- 2) at least 62 semester hours (93 quarter hours) of credit in collegiate work acceptable for credit toward graduation at one of the Iowa Regents universities, with a grade point average of at least 2.00.

At the time of admission the student, in consultation with the BLS adviser, is expected to present a statement of educational objectives and a tentative program for further study which is consistent with those objectives and which will meet the degree requirements listed in the following statements. (This tentative program may be revised as work proceeds.)

Total Credit Requirements: A total of at least 124 semester hours (186 quarter hours) of credit, including transferable credit earned, is required for graduation. The total must fulfill the following specifications:

- 1) 45 semester hours (70 quarter hours) of credit earned at four-year colleges in courses defined as "upper-level" at the colleges in which the courses are taken. (At the University of Iowa and the University of Northern Iowa, upper-level courses are those numbered 100 or above; at Iowa State University upper-level courses are those numbered 300 or above.)
- 2) 45 semester hours (70 quarter hours) of credit earned in courses at the Iowa Regents universities.
- 3) 30 semester hours (45 quarter hours) of credit earned *after* admission to the B.L.S. program from the *specific* Regents university granting the degree.

General Education Requirements: Students must meet the basic undergraduate core requirements as specified and determined by the policies of the degree-granting institution. (Note — Requirements are those specified as Group Requirements of the College of Sciences and Humanities at Iowa State University, General Education at the University of Northern Iowa, and Basic Skills and Core Courses of the College of Liberal Arts at the University of Iowa.)

Program Distribution Requirements: To insure sufficient breadth of study, each student's program must include, in addition to the credit used to fulfill the general education requirements previously stated, a minimum of 12 semester hours (18 quarter hours) of credit in each of three (3) areas selected from the following list. Of the total 36 semester hours (54 quarter hours) of credit applied to fulfill this requirement, 24 semester hours (36 quarter hours) must be in upper-level credits as defined by the institution in which the courses are taken, with at least six (6) semester hours (9 quarter hours) of upper-level credits in each of the three areas chosen.

- a) Humanities
- b) Communications and Arts
- c) Natural Sciences and Mathematical Disciplines
- d) Social Sciences
- e) Professional Fields (such as Business, Education, Home Economics) as approved by the degree-granting institution.

The same credits may not be used to fulfill the general education requirements and also the distribution requirements stated above.

Grade Requirements: A grade average of at least 2.00 must be earned in all work offered for the degree, in all work completed after admission to the program and in all upper-level course work.

Questions concerning Bachelor of Liberal Studies course development, degree implementation, and delivery should be directed to the Office of Continuing Education and Special Programs, Room 144, Gilchrist Hall, UNI.

Information and details regarding admission to the BLS program, evaluation of prior academic work, program advising, and declaration of a major may be obtained from the Coordinator, Individual Studies Program, Baker Hall 59, UNI, Cedar Falls, Iowa 50614. Iowa residents may call the BLS adviser on the toll-free line (1-800-772-1746).



Courses of Instruction

In the following pages, courses are designated by two numbers, separated by a colon. The first number refers to the department or area of the course; the second number refers to the specific course. For example, in the course designated 60:111 the "60" refers to the Department of Art and the "111" refers to the course. In registration always use the full number.

Courses 0-99 are primarily designed for freshman and sophomore students.

Courses 100-199 are primarily designed for junior, senior, and graduate students. *However, only those 100-level courses whose numbers are followed by a "g" provide graduate credit, e.g., 94:149(g).* In all courses of the 100(g) series greater academic achievement, both qualitative and quantitative, is expected of those receiving graduate credit than those receiving undergraduate credit. Freshmen may not register for 100(g)-level courses. Only in very special cases may an exception be granted by the appropriate department head.

Courses 200-299 are primarily designed for graduate students. Undergraduates seeking admission to graduate courses must secure the permission of the head of the department offering the course. Courses numbered 200 taken as an undergraduate cannot later be used for an advanced degree unless the student was eligible to earn graduate credit. See page 37.

Courses 300-399 are primarily designed for doctoral students.

Students are classified as follows:

	Earned Semester Hours
Freshman	less than 30
Sophomore	30-59
Junior	60-89
Senior	90 and over

Graduate classification is earned by admission to graduate study.

Course Numbers Common to Many Departments

These common numbers may be used under named conditions by prefixing the department number:

059, 159, 259 — Reserved for temporary courses of a special or experimental nature.

133 or 233 Workshop — 1 to 6 hrs. Offered for special groups as announced in advance. Students may take work in one or more workshops but may not use more than 6 hours toward graduation.

179 Cooperative Education — 1-6 hrs. For students who wish to apply classroom learning to field experience. Requires approval by the faculty supervisor and the head of the academic department granting credit for: placement contract, project, and credit arrangements. Credit may not be applied to a major or minor without approval by the department offering the major or minor. Co-op staff develop placements, arrange student interviews with employers, and maintain contact with student and employer during the Co-op experience. May be repeated for a maximum of 12 hours credit. (See page 36.)

086, 186, 286 Studies in "_____" — Courses to be offered by departments for specialized work not covered by regular courses. Credit and topic for "study" to be given in Schedule of Classes.

09C, 19C, Open Credit — 1-6 hrs. (See p. 36.)

198 Independent Study — Hours to be arranged in advance. A provision for undergraduate students to do work in a special area not offered in formal courses. (Does not provide graduate credit.) Permis-



sion of the head of the department offering the work is required. Projects must be approved well before the beginning of the semester in which the work is to be done. (See page 36.)

199 Study Tour — 1 to 8 hrs. Offered as announced in the Summer Bulletin and Schedule of Classes. See Summer Bulletin for general description and consult appropriate department for specific information.

285 Readings. Offered as needed in the various disciplines: not offered as a class. Independent readings from a selected list as approved in advance by department head. Credit to be determined at time of registration.

289 or 389 Seminar. Offered as needed in the various disciplines. Credit and topic to be given in Schedule of Classes.

297 Practicum — 2-3 hrs. Offered as needed in the various disciplines to provide practical experience in college teaching.

299 or 399 Research. For details of approval and registration, see pages 154, 175, and 183.

Individual Studies Program

Courses offered in the Individual Studies Program may have a prefix of 00:xxx instead of a department number. These include:

192 Exploratory Seminar — 1-3 hrs.

196 Interdisciplinary Readings — 1-3 hrs.

197 Undergraduate Thesis — 3-6 hrs.

198 Individual Study Project — Hours arranged by Individual Studies Director.

(See pages 19 and 146 for additional information.)

Course Descriptions

In the pages immediately following are listed all the course offered by the various departments of the university. Departments are listed alphabetically. Within each section the list of courses is preceded by the departmental requirements for the majors and minors as well as for the subject field on the middle school/junior high school major. For departments which cover a number of fields, the material has been subdivided. Requirements for graduate majors are listed under The Graduate Program, pages 148-184.

Accounting

Halverson, Head. R. Abraham, Andreessen, D. Davis, MacArthur, Nicholas, Norem, M. Rod, Vermeer.

Note: To graduate with a major in accounting from the School of Business a student must complete 92:053, 92:054, 12:030, 12:031, 15:020, and 15:070 with at least a C — in each course whether taken at UNI or an institution from which transfer credit for these courses is accepted; must earn a 2.2 cumulative grade point average at UNI; and must earn an overall 2.2 grade point average in 12:xxx, 13:xxx, and 15:xxx courses taken at UNI. Accounting courses in which a C — or better grade has been earned may not be retaken for credit without the consent of the department head.

Accounting Major

Required business core: 15:020; 15:070; 15:080; 15:100;
15:151; 15:153; 15:154; 15:175; 12:030; 12:031;
13:152; 92:053; 92:054 39 hours
Required: 12:129; 12:130 6 hours
Electives: at least 12 hours from other accounting
courses 12 hours
57 hours

Students who wish to qualify to sit for the CPA Examination in Iowa must include 12:134 in their accounting electives. In addition, students should substitute the following sequence in place of 15:100 in the Business Core: 15:101, 15:102, and 15:104.

Business Minor — Accounting

Required: 12:030; 13:152; 15:153 9 hours
Electives: at least 9 hours from accounting area 9 hours
18 hours

12:030. Principles of Accounting I — 3 hrs.

Introduction to basic language, principles, and procedures of accounting; emphasis on collection of data for external reporting. Prerequisite: sophomore standing.

12:031. Principles of Accounting II — 3 hrs.

Emphasis on accounting for the corporate form of business, managerial accounting for decision making, financial statement analysis, and accounting for manufacturing firms. Prerequisite: C — or better in 12:030.

12:129. Intermediate Accounting I — 3 hrs.

Principles and procedures, particularly as applied in accounting for assets. Prerequisite: 12:031.

12:130. Intermediate Accounting II — 3 hrs.

Emphasis on accounting for liabilities and owners equity, developing statements from incomplete records, statements of changes in financial position, financial analysis and price-level accounting. Prerequisite: 12:129.

12:131(g). Cost Accounting — 3 hrs.

Uses of accounting data, job order and process cost accounting; cost - volume - profit relationships, budgeting, standard cost systems. Prerequisite: 12:031.

12:132(g). Income Tax — 3 hrs.

Federal taxes as applied to individual and business; emphasis on individual return, including pay-as-you-go, social security, declaration, and payments.

12:134(g). Auditing — 3 hrs.

Principles, practices, and procedures used to determine accuracy and reliability of financial records. Prerequisite: 12:130.

12:135(g). Advanced Accounting — 3 hrs.

Accounting for partnerships, special sales procedures, consolidations, and governmental units. Prerequisite: 12:130.

12:138(g). Advanced Financial Reporting — 3 hrs.

Contemporary financial reporting to financial statement users external to firm. Includes review of auditing standards, selected APB Options and FASB

Statements; study of Securities and Exchange Commission, and the accounting environment; development of accounting principles; plus a comprehensive case problem. Prerequisite or corequisite: 12:134.

12:141(g). Advanced Cost Accounting — 3 hrs.

Continuation of 12:131. Emphasis on cost techniques necessary for management decision making. Prerequisite: 12:131.

12:142(g). Advanced Income Tax — 3 hrs.

Advanced phases of income taxation as related to partnerships and corporations and estate and gift taxes; problems which require investigation of concepts and theories of taxable income.

12:148(g). C.P.A. Review — 3 hrs.

Designed to aid candidates in developing approaches to solutions of problems and answers to questions in the CPA examinations. Prerequisite: Qualified to sit for CPA examinations.

12:169(g). Internship — Accounting — 2-8 hrs.

Full-time accounting internship for minimum of eight weeks. Prerequisites: departmental consent and 2.5 cumulative UNI grade point.

12:170(g). Special Problems — Accounting — 1-3 hrs.

Directed readings, reports, and/or projects. Prerequisite: consent of department head.

12:179. Cooperative Education in Accounting — 1-6 hrs.

Offered only on ungraded basis.

12:230. Accounting Survey and Analysis — 3 hrs.

Basic accounting concepts and procedures; determination of periodic income; preparation and interpretation of financial statements. Open only to graduate students without previous credit in accounting. Prerequisite: consent of MBA adviser.

12:240. Theory of Accounts — 3 hrs.

History and development of accounting principles; theoretical problems related to determination of income; presentation of financial condition. Prerequisites: 12:130 or equivalent; and consent of MBA adviser.

12:262. Managerial Accounting — 3 hrs.

Use of accounting data in managerial decision making process and in the analysis and control of business operation. Prerequisites: 12:030 and 12:031; or 12:230; or equivalent; and consent of MBA adviser.

Art

*Ruffo, Head. Adelman, H. Anderson, *Bigler, Bigus, Burton, Cassino, Colburn, Echeverria, *Estabrook, Finegan, Gogel, Gunter, Haupt, Leedy, Onyile, Page, Powell, Shickman, Siddens, Vander Werf.*

*on leave

Note: No grade of less than C — shall satisfy any Art major or minor degree requirement whether taken at UNI or transferred from another institution.

Foundations Program

A program of visual inquiry and discovery providing the most essential beginning experience requisite to functioning as a creative artist is required in all art major and art minor programs for a total of 18 semester hours:

Required: 60:001; 60:003; 60:026; 60:027; 60:040;
60:041 18 hours

Bachelor of Fine Arts Degree Program

Art Major

Programs of study: Ceramics, graphic design, drawing, metalwork, painting, photography, printmaking, and sculpture.

Required Foundations Program 18 hours
Required studio distribution 12 hours
— two courses from each of the following groups:
Group 1 — 60:025; 60:032; 60:034; 60:080
Group 2 — 60:037; 60:050; 60:055 or 60:057; 60:074
Required drawing courses 6 hours
History of art electives 9 hours
Studio electives 24 hours
75 hours

Note: Each art major is required to participate in the departmental jury system. Details may be obtained from the departmental office.

A senior exhibition demonstrating competency is required of each student enrolled in this degree program. Details may be obtained from the department office.

Bachelor of Arts Degree Programs

Art Major — Teaching

Required Foundations Program 18 hours
Required studio distribution 12 hours
— two courses from each of the following groups:
Group 1 — 60:025; 60:032; 60:034; 60:080
Group 2 — 60:037; 60:050; 60:055 or 60:057; 60:074
Required drawing courses 6 hours
Required: 60:091; 60:092; 60:193; 60:194 9 hours
Electives: history of art 6 hours
51 hours

It is recommended that students elect an emphasis in either *studio* or *art history*.

Studio emphasis: 9 hours in any one of the following areas — ceramics, graphic design, drawing, metalwork, painting, photography, printmaking, or sculpture.

Art history emphasis: 15 hours of 100-level courses in art history.

Each art major is required to participate in the departmental jury system. Details may be obtained from the department office.

Art Major

Required Foundations Program 18 hours
Required studio distribution 6 hours
— one course from each of the following groups:
Group 1 — 60:025; 60:032; 60:034; 60:080
Group 2 — 60:037; 60:050; 60:055 or 60:057; 60:074
Required drawing courses 6 hours
Electives: history of art 6 hours
Art electives 9 hours
45 hours

It is recommended that students elect an emphasis in either *studio* or *art history*.

Studio emphasis: 9 hours in any one of the following areas — ceramics, graphic design, drawing, metalwork, painting, photography, printmaking, or sculpture.

Art history emphasis: 15 hours of 100-level courses in art history.

Each major is required to participate in the departmental jury system. Details may be obtained from the department office.

Art Minor — Teaching

Required Foundations Program 18 hours
Required studio electives 3 hours
Required in art education 4 hours
25 hours

Art Minor

Required Foundations Program 18 hours
Art elective 3 hours
21 hours

Note: For all studio courses in the Department of Art programs the ratio of student work hours to credit hours is 3:1. Therefore, additional work is required outside the regular class meeting times.

60:001. The Visual World — 3 hrs.

Beginning experiences in communication through visual language emphasizing flexible approaches to problem solving; exploration of relationships between the visual arts and other fields of human endeavor. Corequisite for art majors and/or minors: 60:003.

60:003. The Visual Arts: Current Trends — 3 hrs.

Exploration and discovery of the concepts and modes of expression in the art of our time. Informal lecture with group project participation. Fall. Corequisite for art majors and minors: 60:001.

60:018. Drawing I — 3 hrs.

Emphasis on growth in perception of visual form. Range of materials and subject matter.

60:019. Drawing II — 3 hrs.

Continuation of 60:018 with greater emphasis upon self-direction. Prerequisite: 60:018.

60:025. Graphic Design I — 3 hrs.

Introduction to graphic design concepts and methods. Basics of topography, letter forms, layout and print production.

60:026. Two-Dimensional Media — 3 hrs.

Beginning experiences in conceiving and making in two dimensions; emphasis on the interaction between work and idea, skills in art making, and the common vocabulary of art. Prerequisites (for art majors and minors): 60:001; 60:003. Corequisite (for art majors and minors): 60:027.

60:027. Three-Dimensional Media — 3 hrs.

Beginning experiences in conceiving and making in three dimensions; emphasis on the interaction between work and idea, skills in art making, and the common vocabulary of art. Prerequisites (for art majors and minors): 60:001; 60:003. Corequisite (for art majors and minors): 60:026.

60:032. Creative Photography I — 3 hrs.

Heightening perceptual and conceptual awareness through the intermediacy of the camera and photosensitive emulsions.

60:034. Printmaking — 3 hrs.

May be repeated for credit but not in the same section. Students may select from the following sections: 1. Intaglio; 2. Lithography; 3. Woodcut; 4. Serigraphy.

60:037. Sculpture — 3 hrs.

Handling visual ideas and learning to interpret them directly; emphasis on sensitivity to possibilities of materials, awareness of processes involved in thinking visually, with a search for forms which best communicate this.

60:040. Survey of Art History I — 3 hrs.

Introduction to the history of art; ancient through medieval. Fall.

60:041. Survey of Art History II — 3 hrs.

Introduction to the history of art; renaissance through modern. Spring.

60:050. Ceramics I — 3 hrs.

Ceramic materials, design, forming, glazing, and firing.

60:051. Ceramics II — 3 hrs.

Continuation of 60:050 with further development in technical and aesthetic skills. Prerequisite: 60:050.

60:055. General Crafts — 3 hrs.

Introduction to production of art objects using fibers, leather, wood, paper, metals, and other craft materials and employing a variety of skills and techniques. Explores role of crafts in teaching, recreation programs, and personal expression.

60:056. Fibers — 3 hrs.

Applications of contemporary ideas to traditional skills with fiber materials; introduction to fiber and textile design, including weaving, knotting, batik, tie-dye, and stitchery.

60:057. Wood Design — 3 hrs.

Introduction to technical and aesthetic aspects of wood design; design problems in various uses of woods; wood combined with other materials.

60:074. Jewelry and Metalwork — 3 hrs.

Forming, joining, decorating, and combining precious and non-precious metals with other materials.

60:080. Painting I — 3 hrs.

Experience in various painting media.

60:081. Painting II — 3 hrs.

Continuation of 60:080 with greater emphasis upon self-direction. Prerequisite: 60:080.

60:089. Art Major Jury — no credit.

60:091. Elementary Art Education I — 2 hrs.

The art-making process of children from pre-school to junior high; philosophy and research of art education, scope and sequence of art tasks for typical and handicapped children, and the articulation of art curriculum with schools and community facilities.

60:092. Elementary Art Education II — 3 hrs.

Exploration of tools, materials, and processes of art education; individual and group activities in arts and crafts to develop skill in safe use of tools and materials; includes puppetry and visual display. Requires minimum of 30 hours of observation and participation in a teaching program. Prerequisite: 60:091.

60:111. Life Drawing — 3 hrs.

Drawing from the model using a variety of media. May be repeated for credit. Prerequisite (for art majors only): 60:018.

60:118. Drawing III — 3 hrs.

Prerequisite: 60:019 or 60:111.

60:125. Graphic Design II — 3 hrs.

Exploration of approaches to illustration and the integration of type and graphic images. Includes class problems as well as design projects for the university and community. Prerequisite: 60:025.

60:126. Graphic Design III — 3 hrs.

Advanced problems in graphic design. Design systems, corporate identity packaging and signage. Prerequisite: 60:125.

60:127. Publication Design — 3 hrs.

Lecture-studio course on layout and typography of various types of publications; includes content research and analysis, display, text type and illustration trends, design formats, and specialized publications and audiences. Prerequisite or corequisite (for art majors or minors only): 60:125.

60:128. Graphic Design-Illustration — 3 hrs.

Basic media, techniques, paper selection, and tools for execution of solutions ranging from black and white line to full-color, continuous tone in 2D and 3D form. Specialized commercial illustration problems imposed by mechanical production requirements considered. Historical overview of styles. Prerequisite or corequisite: 60:125.

60:130. Creative Photography II — 3 hrs.

Creative use of the medium for continuing students; emphasis on development of individual's ideas and directions; includes advanced processes, presentation and exhibition techniques. Prerequisite: 60:032 or equivalent.

60:131. Creative Photography III — 3 hrs.

Extension of photography as creative image making; in-depth look at processes, criticism, and student's own ideas and directions in photography. Prerequisite: 60:130.

60:132. Color Photography — 3 hrs.

Introduction to most commonly used color photographic processes including transparency film, negative films, negative and reversal printing papers. Prerequisite: 60:130 or equivalent.

***60:134. Advanced Printing — 1-5 hrs.**

May be repeated for credit. Credit to be determined at time of registration. Students must have successfully completed the first course in the section selected, and may select from the following sections: 1. Intaglio; 2. Lithography; 3. Woodcut; 4. Serigraphy.

60:137. Advanced Sculpture — 3 hrs.

Continuation of 60:037 with greater emphasis upon self-direction. May be repeated once. Prerequisite: 60:037.

60:141(g). Art History — 3 hrs.

May be repeated for credit but not in the same section. Students may select from the following sections: 1. Medieval; 2. Northern Renaissance; 3. Indian; 4. Japanese; 5. Ancient Greece; 6. Ancient Rome; 7. Chinese.

60:142(g). Italian Renaissance Art — 3 hrs.

History of 14th, 15th, and 16th century Italian art.

60:144(g). Baroque and Rococo — 3 hrs.

History of Baroque and Rococo art in 17th and 18th century Europe.

60:146(g). 19th Century European Art — 3 hrs.

Napoleonic art to Art Nouveau.

60:147(g). Oriental Art — 3 hrs.

Introduction to the arts of India, Southeast Asia, China and Japan.

60:148(g). Contemporary Art History — 3 hrs.

Studies in the nature and role of contemporary art.

60:150. Ceramics III — 3 hrs.

Prerequisite: 60:051.

***60:156. Advanced Crafts — 3 hrs.**

Continuation of 60:055 or 60:056 with greater emphasis upon self-direction. May be repeated once. 1. Crafts — Prerequisite: 60:055. 2. Fibers — Prerequisite: 60:056.

60:157. Advanced Wood Design — 3 hrs.

Continuation of 60:057 with greater emphasis upon self-direction. May be repeated once. Prerequisite: 60:057.

60:170. Advanced Metalwork — 3 hrs.

Continuation of 60:074 with greater emphasis upon self-direction. May be repeated once. Prerequisite: 60:074.

60:175. Undergraduate Studio — 1-6 hrs.

Investigation of personal visual concepts and techniques in a given studio area for qualified students who demonstrate intensive involvement and seek professional competency. Individual instruction. Sections: 1. Ceramics; 2. Drawing; 3. Graphic Design; 4. Metalwork; 5. Painting; 6. Photography; 7. Printmaking; 8. Sculpture. Prerequisite: 9 hours in studio area chosen. Credit to be determined by consent of instructor at time of registration. May be repeated for credit.

60:180. Painting III — 3 hrs.

Prerequisite: 60:081.

60:189. B.F.A. Exhibition — no credit.

60:193. Secondary Art Education I — 2 hrs.

Art media processes, facilities, students, content, methods, and philosophy of secondary art education; its relation to the elementary level, and an emphasis on middle/junior high art activities, courses and programs. Prerequisite: 60:092.

60:194. Secondary Art Education II — 2 hrs.

Continuation of 60:193 with emphasis on senior high art activities, courses, and programs. Prerequisite: 60:193.

60:198. Independent Study.

60:275. Graduate Studio.

Investigation of personal visual concepts and techniques in a given studio area for qualified students who demonstrate intensive involvement and who seek professional competency. Individual instruction. Credit to be determined at time of registration. May be repeated for credit. 1. Ceramics; 2. Drawing; 3. Metalwork; 4. Painting; 5. Photography; 6. Printmaking; 7. Sculpture. Prerequisite: approval of Chairman, Graduate Studies in Art.

60:280. Seminar: Critique and Analysis — 2 hrs.

Analysis of concepts, forms and techniques encountered in own creative studio work and work of others. Investigation of individually selected concepts and materials. Examines role of professional artist and public.

60:289. Seminar: Issues in Higher Education in the Visual Arts I — 2 hrs.

Introduction of various issues in higher education which confront the college art instructor.

60:289. Seminar: Issues in Higher Education in the Visual Arts II — 2 hrs.

Individually selected issues in the visual arts for discussion and research.

60:289. Seminar: Intra-Media — 2 hrs.

Theories and philosophies of contemporary artists and art criticism as related to student's studio work.

60:293. Research in Art History — 1-3 hrs.

May be repeated for credit. Prerequisite: 6 hours in graduate-level art history.

60:294. Internship — 3-9 hrs.

Student-selected areas of practical internship experiences relating to student's particular interest in the visual arts in higher education. Maximum enrollment per semester: 6 hours. Prerequisite: department approval.

60:295. Seminar in Teaching Art — 3 hrs.

Specific art education relating to public schools with emphasis upon continuity of art activity. Satisfies the special methods elective for the professional core.

60:296. The Supervision of Art — 3 hrs.

Teaching problems and practices relating to the curriculum and the supervision of art.

60:297. Practicum.

60:299. Research.

*First registration for 3 hours only.

Biology

D. Smith, Head. Bergquist, Clausen, Dowell, Downey, Eilers, Goss, Haman, C. Lee, Lowther, McCalley, McCollum, Orr, Picklum, Riggs, O. Schwartz, Seager, Simpson, TePaske, Whitson, N. Wilson.

A multi-route biology curriculum enables the major to elect one of several plans. A program drawn up by the student and departmental adviser specifies which plan has been selected. This program should be completed as soon as possible after the declaration of major. Transfer students with courses in biology, zoology, or botany must have transfer courses evaluated to avoid duplication and possible loss of credit. Confirm with department head or departmental adviser decisions regarding UNI major courses and transfer credits.

Biology Major — Teaching

The Biology Teaching Major provides a broad education in the biological sciences and, with student teaching and other courses designed specifically for those planning to teach, prepares one to teach biology, life science and similar courses at the secondary level. Students planning a teaching career should contact their academic advisers early in their programs. This program also serves as an excellent base for graduate level education in the biological sciences or in science education.

Required:

Biology: 84:051; 84:052; 84:114 or 84:138; 84:122;	
84:128 or 84:151; 84:140; 84:142; 84:168; 84:193	30-31 hours
Cognate: 86:048 or 86:070; either 86:050 and 86:132	
or 86:120, 86:121 and 86:123; 87:035 or 88:056	15-17 hours
Electives in Biology from among: 84:103; 84:112;	
84:120; 84:160; 84:166; 84:170	7-10 hours
	55 hours

Biology Major: Plan X

This major provides a broad training in biology but allows various emphases through choice of electives. Those who wish to enter graduate study in biology, botany, zoology or other fields in the biological sciences should take this major and work with an adviser in their area of specialty.

Required:

Biology: 84:051; 84:052; 84:128; 84:140; 84:168	19 hours
Cognate: Either 86:044 and 86:048 or 86:070; either	
86:050 and 86:132 or 86:120, 86:121 and 86:123;	
either 87:031 and 87:035 or 88:054 and 88:056	20-24 hours
Electives in Biology (100 level or above)	12-16 hours
	55 hours

Note: A working knowledge of algebra and trigonometry is necessary.

Biology Major: Plan Y

This major offers basic preparation to students for medical, osteopathic, dental, veterinary, optometry, podiatry and other health related programs. In addition it prepares students for graduate study in the Biomedical Sciences such as pharmacology, toxicology, pathology, physiology, cellular biology and related areas. Students should seek advice and information early in their programs so that individual goals and specific additional requirements of some graduate programs can be considered in curriculum planning.

Required:

Biology: 84:051; 84:052	8 hours
Cognate: either 86:044 and 86:048 or 86:070; 86:120; 86:121; 86:123; 88:054; 88:056; 80:046 or 80:048 or 80:060 or equivalent	25-29 hours
Electives in Biology to be selected from the following in consultation with adviser: 84:106; 84:108; 84:112; 84:114; 84:117; 84:128; 84:132; 84:138; 84:140; 84:151	18-22 hours
	55 hours

Biotechnology Major

This major prepares individuals for potential employment in industries which process foods, manufacture pharmaceuticals, conduct environmental monitoring or carry on other biologically related activities. Specific jobs may range from product analysis to environmental samples and analysis according to industrial and/or governmental standards.

Required biology: 84:051; 84:052; 84:128; 84:132; 84:151; 84:157	22 hours
Required cognate courses: 86:044 and 86:048, or 86:070; 86:132; 86:050 or 86:120; 86:121; 86:123	13-20 hours
Electives from: 80:070; 84:114; 84:140; 84:168; 84:170; 88:054; 88:056	13-20 hours
	55 hours

Natural History Interpretation Major

This program prepares students in field natural history for employment with park systems, nature centers and museums. The interpretive naturalist is a communicator about nature, the environment and ecological management, leading field trips, developing indoor and outdoor programs and managing natural areas.

Required biology: 84:051; 84:052; 84:103; 84:122 or 84:170; 84:168; 84:160; 84:166; 84:176 or 84:177 or equivalent; 84:180; 84:182	34 hours
Required cognate courses: 82:132; 86:044 and 86:048, or 86:070; 87:031; 87:035	15-18 hours
Electives at 100 level in biology or earth science	3-6 hours
	55 hours

Biology Minor — Teaching

Required: 84:051; 84:052; 84:193; 86:044 or 86:070 (Home Economics majors may substitute credit in 86:061 for this requirement)	15-16 hours
Electives in Biology at 100 level	8-9 hours
	25 hours

Biology Minor

Required: 84:051; 84:052	8 hours
Electives in Biology at 100 level	15 hours
	23 hours

84:021. LIFE: Environmental Relationships — 3 hrs.

Man as an integral part of the balance of nature, not as an external manipulator. Experience in collecting and interpreting ecological data and relating same to environmental problem areas. Lecture/discussion, 3 periods. No credit on major or minor.

84:023. LIFE: Adaptation and Survival — 3 hrs.

Mechanisms by which organisms and populations, including man, have adapted to respective environments and how adaptive information is stored, transmitted, utilized and exchanged. Lecture/discussion, 3 periods. No credit on major or minor.

84:028. Biosphere: Life and Its Interrelationships — 3 hrs.

Basic concepts of biology including material, structure, development, energy flow, and evolution of life; and unity and diversity of life and its interactions with the living and non-living world. No credit on major or minor or for students with post-high school courses in biology, botany, or zoology. Lecture/discussion, 3 periods.

84:030. Introduction to Anatomy and Physiology — 5 hrs.

Fundamentals of the anatomy and physiology of the human body. Prerequisite: first-year classification in the nursing program at Hawkeye Institute of Technology. Discussion, 3 periods; lab., 4 periods.

84:031. Anatomy and Physiology I — 4 hrs.

Structure and function of the organ systems of the human body. Open only to nurses in training. Discussion, 3 periods; lab., 2 periods.

84:032. Anatomy and Physiology II — 4 hrs.

A continuation of 84:031. Open only to nurses in training. Prerequisite: 84:031. Discussion, 2 periods; lab., 2 periods.

84:033. Principles of Microbiology — 3 hrs.

The basic concepts and practical applications of microbiology in medicine, immunology, sanitation and food preparation in daily life. Designed for students majoring in areas other than science. Sections may be offered exclusively for nurses in training. Discussion, 2 periods; lab., 2 periods.

84:051. General Biology I — 4 hrs.

Study of organismic biology emphasizing evolutionary patterns and the diversity of organisms as well as the interdependency of structure and function in living systems. Discussion 3 periods; lab., 2 periods.

84:052. General Biology II — 4 hrs.

Study of cells, genetics and populations emphasizing the chemical basis for life, the flow of information and the interactions of populations in ecosystems. Discussion 3 periods; lab., 2 periods. Prerequisite: 84:051.

84:089. Seminar — 1 hr.

84:103(g). Conservation of Iowa Resources — 3 hrs.

Natural resources of Iowa, including soil, forest, wildlife, minerals and water, their interrelationships with the economics and social development of the state and nation; techniques of natural resources management. Discussion, 2 periods; lab., 2 periods. Prerequisite: 84:052 and junior standing.

84:104(g). Iowa Conservation Problems I — 3 hrs.

Forests, wildlife and ecology relationships. Field experience. Preparation of visual aids, demonstrations and projects. Offered only at Iowa Teachers Conservation Camp.

84:105(g). Iowa Conservation Problems II — 3 hrs.

Soil, water, and mineral resources. Field experience. Preparation of visual aids, demonstrations and projects. Offered only at Iowa Teachers Conservation Camp.

84:106(g). Comparative Anatomy of the Vertebrates — 4 hrs.

Consideration of the origin of vertebrates and a comparison of the anatomy of the organ systems of the classes. Discussion, 2 periods; lab., 4 periods. Prerequisites: 84:052 and junior standing.

84:108(g). Vertebrate Embryology — 4 hrs.

Development of vertebrate organism. Formation and development of germ cells; fertilization; growth and differentiation. Discussion, 2 periods; lab., 4 periods. Prerequisite: 84:106.

84:112(g). Invertebrate Zoology — 4 hrs.

Anatomy and physiology of type forms of the invertebrate phyla. Discussion 2 periods; lab., 4 periods. Prerequisites: 84:052 and junior standing.

84:114. Animal Physiology — 4 hrs.

Organ system functions in animals; physical and chemical basis for functions; comparison of organ system function especially in vertebrates. Discussion 3 periods; lab., 2 periods. Prerequisites: 84:052; either 86:050 or 86:120 and 86:121; one semester of physics recommended.

84:117(g). Endocrinology — 3 hrs.

Hormonal control of various organ functions including cellular effects and biochemistry of endocrine organs. Graduate students must enroll in "Endocrinology Laboratory." Discussion, 3 periods. Prerequisites: 84:114 or 84:138; 84:128 or 86:150.

84:118(g). Endocrinology Laboratory — 1 hr.

Experience in experimental endocrine surgery in small laboratory animals. Collection of experimental data and its analysis; 3 periods. Prerequisite or corequisite: 84:117.

84:120(g). Plant Morphology — 4 hrs.

Structure and evolution of plant phyla with emphasis upon algae, fungi, mosses, and ferns. Prerequisite: 84:052 and junior standing.

84:122. Plant Physiology — 3 hrs.

Functional aspects of plant processes related to composition, metabolism, transport mechanisms, growth and development. Discussion, 2 periods; lab., 3 periods. Prerequisites: 84:052; 86:048 or 86:070.

84:124(g). Introduction to Mycology — 4 hrs.

Biology of fungi including taxonomic groupings, evolutionary affinities, and roles in organic cycling and effects upon plants, animals, and man. Includes field collections and culture of fungi. Prerequisites: 84:052 and junior standing. Discussion, 2 periods; lab., 4 periods.

84:128(g). Cell Biology — 3 hrs.

Fundamental physiological processes of cellular function with emphasis on metabolism, respiration, photosynthesis, and cellular membranes. Discussion, 2 periods; lab., 3 periods. Prerequisites: 84:052; either 86:050, or 86:120 and 86:121.

84:130(g). Protozoology — 4 hrs.

Consideration of systematics, morphology, physiology, morphogenesis, genetics and ecology of free-living and parasitic protozoa; literature studies on contemporary research and historical perspective. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisites: 84:052 and junior standing.

84:131(g). Animal Behavior — 4 hrs.

Psychological, physiological, sociological, and ethological approaches to behavior; relationship between behavior and environment, and experimental variables. Discussion, 3 periods; lab., 3 periods. Prerequisites: 84:052 and junior standing.

84:132(g). Parasitology — 4 hrs.

Morphology, ecology, and life history of parasites important to man and other animals. Discussion, 2 periods; lab., 4 periods. Prerequisite: 84:112 or written consent of instructor.

84:135(g). Topics in Cytology — 2 hrs.

Organization and function of sub-cellular organelles and assemblies of eukaryotic cells. Prerequisite: 84:128 (may be taken concurrently). Discussion, 2 periods.

84:138. Human Physiology — 4 hrs.

Anatomy and functioning of organ systems of the human body. Prerequisites: 84:052 and junior standing. Discussion, 2 periods; lab., 2 periods.

84:140(g). Genetics — 4 hrs.

Analytical approach to classical, developmental and population genetics. Discussion, 3 periods; lab. projects arranged. Prerequisites: 84:052 and junior standing.

84:142(g). Organic Evolution — 2 hrs.

Concepts and consequences. Mechanics of the evolution as evidenced by comparative anatomy, biochemistry, embryology, and the fossil record. Genetics of the evolutionary process. Speciation and origin of higher taxa. Prerequisite: 84:140.

84:146(g). Developmental Genetics — 4 hrs.

Patterns and principles of animal development. Emphasis on current concepts in developmental genetics. Discussion and lab., two 3-hour periods. Prerequisites: 84:052 and junior standing.

84:151(g). General Microbiology — 4 hrs.

Physiology, morphology, taxonomy, immunology, and pathogenicity of microbes, with applications to medicine, agriculture, sanitation, and industry. Discussion, 2 periods; lab., 4 periods. Prerequisites: 84:052; 86:048 or 86:070.

84:157(g). Biostatistics — 3 hrs.

Experience relating experimental design to appropriate quantitative data analysis and hypothesis interpretation. Parametric and non-parametric statistics will be discussed. Practical applications will include the use of computerized statistical packages. Discussion, 2 hours; lab., 2 hours. Prerequisites: 80:046 or equivalent, junior level standing and two biology courses beyond the introductory sequence, or permission of the instructor.

84:160(g). Field Zoology of Vertebrates — 4 hrs.

Identification and natural history of Iowa vertebrates. Field trips emphasized. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisites: 84:052 and junior standing.

84:166(g). Plant Systematics — 4 hrs.

Biology of angiosperms, including classification, evolution, population structures, and breeding systems. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisites: 80:052 and junior standing.

84:168. Ecology — 3 hrs.

Relationship of organisms to their environment with emphasis upon the principles of population, community and ecosystem structure and dynamics. Discussion, 2 periods; lab., 3 periods. Prerequisite: 84:052.

84:170(g). Entomology — 4 hrs.

Introduction to the biology of insects. Discussion, 2 periods; lab., 4 periods. Prerequisites: 84:052 and junior standing.

84:172(g). Plant Anatomy — 4 hrs.

Ontogeny, growth and differentiation of simple and complex tissues of root, stem, leaf, and reproductive organs of higher plant groups. Discussion, 2 periods; lab., 4 periods. Prerequisites: 84:052 and junior standing.

84:176(g). Community Ecology — 3 hrs.

Investigation of the origin, structure, function, dynamics, and evolution of communities with emphasis upon their floral components. Discussion, 2 periods; lab., 2 periods. Prerequisite: 84:168 or equivalent.

84:177(g). Population Ecology — 3 hrs.

Covers the genetics, evolution, structure, and dynamics of populations and the interactions of populations. Emphasis will be given to animal population ecology. Lecture/discussion, 2 periods; lab., 2 periods. Prerequisite: 84:168 or equivalent.

84:180(g). Management of Recreational Land — 3 hrs.

Ecological principles applied to design, development and management of natural areas, parks, and wildlands. Discussion, 2 periods; lab., 2 periods. Prerequisites: 84:103 and 84:168.

84:182. Current Environmental Issues — 2 hrs.

Investigation and discussion of selected current environmental issues of national and local significance. The scientific and technological basis of each issue will be examined in its socio-economic context and projected to the future. Discussion, 2 periods. Prerequisite: 84:103 or written permission of instructor.

84:183(g). Topics in Molecular Biology — 1 hr.

Current research information and techniques extending the molecular aspects of cellular, physiological and genetics courses. Topics such as genetic engineering, calcium metabolism, protein synthesis, nucleic acids, and molecular evolution will be offered. May be repeated on different topics for a maximum of 6 hours.

84:185. Readings in Biology — 1-3 hrs.

Independent readings in biology from a selected list approved in advance. Maximum of 3 hrs. for biology major or minor. Prerequisite: departmental approval.

84:189. Seminar — 1 hr.

84:193(g). Current Curricula in Biology — 2 hrs.

Philosophy, methods, and materials of high school biology curricula and curriculum development. Examination and evaluation of current curricular materials for secondary biology and life science classes. Prerequisites: 82:190; 84:052 or written consent of instructor.

84:195. Internship/Field Experience — 1-8 hrs.

Supervised experience in approved work situation. Full-time for one-half semester or summer session, or one-half time for full semester will receive maximum credit. Offered only on "credit/no-credit" basis; no credit allowed on major.

84:197. Undergraduate Practicum in Biology Teaching — 1 hr.

Practical experience in teaching. Participation in laboratory and instructional assistance under direct supervision of faculty member. May be repeated once for credit. Offered only on "credit/no-credit" basis; no credit allowed on major. Prerequisite: departmental approval.

84:198. Independent Study.

84:202. Graduate Colloquium — 1 hr.

Weekly presentation by a student, faculty member, or visitor on a biological topic. Shall be taken twice during initial two semesters for a maximum of two credits. Discussion, 1 period.

84:210. Biological Techniques — 3 hrs.

Biological techniques of the teacher of biology. Lab., 6 periods.

84:220. Advanced Plant Morphology — 4 hrs.

Life histories of representatives of the plant phyla. Morphological and physiological advancements which have resulted in the gradual evolution of flowering plants. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisite: 84:120.

84:225. Aquatic Biology — 4 hrs.

The biological, physical and chemical aspects of aquatic environments with special emphasis on collection and identification of aquatic organisms. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisites: 84:168; 86:048 or 86:070.

84:230. Special Problems in Biology — 1-6 hrs.

Credit determined at registration. (Problems in biology other than those for theses or in regular curricular offerings.) Prerequisite: departmental approval; 84:292 recommended.

84:242. Advanced Physiology — 3 hrs.

Selected organ systems explored in detail with respect to their function; emphasis on current research information for the organ systems studied. Discussion, 3 periods. Prerequisites: 84:114 or 84:138; 84:128 or 86:150; 86:120; 86:121; 88:054.

84:243. Advanced Physiology Laboratory — 1 hr.

Experience with physiological recording and analysis of data gathered. Experiments directed toward understanding of factors that alter physiological responses and interpretation of those alterations as they relate to underlying causes and consequences for the organism. Corequisite: can only be taken concurrently with 84:242.

84:251. Microbial Ecology — 4 hrs.

Experimental design, instrumental methods of analysis used in investigating the ecology and physiology of bacteria and fungi. Student must complete one research project. Prerequisite: 84:151 or equivalent. Discussion, 2 periods; lab., 4 periods.

84:255. Physiological Ecology — 3 hrs.

Chemical responses of plant individuals to variables in their environment and the concomitant influences of their morphological and behavioral evolution. Prerequisites: 84:168; and any two of 84:122, 84:128, or 84:151. Discussion, 2 periods; lab., 2 periods.

84:257. Biometry — 2 hrs.

Experience in relating experimental design to appropriate quantitative data analysis and hypothesis interpretation. Practical application to include use of BMDP computerized statistical package. Students will use their undergraduate experience in biology to design and analyze experiments. The course will culminate with each student preparing a proposed experimental design and data analysis suitable for completion as a thesis or research project. Discussion, 1 hour; lab., 2 hours. Prerequisites: bachelor's degree in biology; 84:157 (concurrent enrollment acceptable) or equivalent; or permission of instructor.

84:289. Seminar — 1 hr.

84:292. Research Methods in Biology — 3 hrs.

Development and formal preparation of a biological research proposal; emphasis upon experimental design, literature review, and manuscript style. Discussion, 3 periods.

84:297. Practicum.

84:299. Research.

The following courses are regularly scheduled at Lakeside Laboratory by staff from the three Regents institutions. Enrollment is limited and permission of the instructor is required for all courses. Registration may be for undergraduate or graduate credit. Visiting staff may extend the course work offerings in particular summers. For current information, see the annual Iowa Lakeside Laboratory Bulletin usually available from the UNI Department of Biology after February 15 each year. Numbers within parentheses are the Lakeside Laboratory numbers.

89:101(g) (L:101). Field Biology — 5 hrs.

Natural history and principles of ecology of the aquatic and terrestrial ecosystems of the area, including basic taxonomy of the native fauna and flora. Includes field and laboratory techniques. Individual projects included.

89:103(g) (L:103). Aquatic Ecology I — 5 hrs.

Survey of local aquatic plants and animals and of aquatic habitats including environmental and community analysis. Emphasis on field work and appropriate methods.

89:104(g) (L:104). Aquatic Ecology II — 5 hrs.

Project work as continuation of 89:103.

89:105(g) (L:105). Plant Taxonomy — 5 hrs.

Basic principles of classification and evolution of vascular plants. Taxonomic tools, techniques, and the native flora is explored; includes field collections and group projects. Not to be taken by those with credit in 84:166.

89:108(g) (L:108). Protozoology — 5 hrs.

Biology of the protozoa; emphasis on morphology, physiology, systematics, and development of free living and parasitic forms. Collection, culture, and classification of local specimens; experimental work to be included. No credit for those with credit in 84:130.

89:109(g) (L:109). Freshwater Algae — 5 hrs.

Laboratory examination of collections made daily by class in Iowa Lakes Region; correlation made by student of text description with observations of living materials.

89:118(g) (L:188). Field Entomology — 5 hrs.

Introduction to entomology with emphasis on methods of collecting and classifying insects, and on their natural history. Reference collections will be made with classification to order and family. No credit for those with credit in 84:170.

89:119(g) (L:119). Field Biology of Lower Green Plants — 5 hrs.

Field and laboratory investigation of mosses, liverworts, club mosses, quillworts, horsetails, and ferns. Many of these primary mesic plants have their western limits in the variety of habitats in Iowa.

89:207(g) (L:107). Helminthology — 5 hrs.

Structure, life cycles and host parasite relationships of representative helminths; methods of collecting, preserving, mounting, and identification; experimental life cycles, methods of studying living materials, special techniques for research in helminthology.

89:210 (L:110). Field Invertebrate Zoology — 5 hrs.

Biology of invertebrates with emphasis on local freshwater and terrestrial forms, their structure, systematics, and behavior. Methods of collecting, culture, preserving, identifying, emphasis on study of living material. For students with background in invertebrate zoology.

89:215 (L:115). Field Mycology — 5 hrs.

Identification and classification of the common fungi. Techniques for identification, preservation, and culture.

89:217 (L:117). Ecology and Systematics of Diatoms — 5 hrs.

Field experience in study of fresh-water diatoms from a variety of habitats; environmental factors affecting growth and distribution; techniques in collection and preparation of diatom samples.

89:224 (L:124). Aquatic Plants — 5 hrs.

Field analysis of aquatic and paludal vegetation; morphology, breeding systems and identification based on vegetative characteristics.

89:299 (L:111; L:112). Research.

Business Education and Administrative Management

Warner, Head. Gammill, Handorf, Klink, Reed, Timpany.

Business Education Major — Teaching

Required core: 12:030; 12:031; 13:152; 15:020; 18:70
or 15:080; 15:100*; 15:151; 15:153; 15:154;
15:175; 92:053** 33 hours
Required: one of the emphases listed below —
(minimum total) 58 hours

*Accounting Emphasis should substitute 15:102.

**92:024 must be taken before 92:053.

Emphases: A student must complete one of the following emphases: General Business, Accounting, Secretarial/Office Education, or Marketing and Distributive Education.

A. General Business —

Required: 14:051; 15:010; 15:101; 15:152, 17:014;
17:190 (Accounting/Data Processing, Basic
Business/Consumer Economics, and one in a
skill area); 14:060; 18:113; 18:130; 31:177 25 hours

B. Accounting —

Required: 12:129; 12:130; 14:051; 14:060; 15:010;
15:101*; 17:014; 17:190 (Accounting/Data
Processing, Basic Business/Consumer
Economics, and one methods in a skill area);
18:113; 18:130 26 hours**

*Should substitute 15:102 for 15:100 in the core.

**Core for this emphasis requires total of 32 hours.

Required for C.P.A. examination: Students planning to sit for C.P.A. examination in Iowa must take a minimum of 48 hours in business and economics which must include 12:134. Among the required 48 hours students are strongly encouraged to complete all of the following courses: 12:131; 12:132; 12:135; 12:138; 12:141; 12:142; 15:070.

C. Secretarial/Office Education —

Required: 14:051; 14:058; 14:60; 14:152, 17:014;
17:190 (Typewriting, Shorthand, and one non-
skill); 18:113; 18:120; 18:130 25 hours

Students desiring Vocational Certification as an Office Education Teacher Coordinator must meet the following additional requirements:

1. 17:113; 17:119.
2. 3,000 hours of work experience in office occupation approved by an office education teacher educator for quality, recency, and diversity. (Up to 2,000 hours may be earned by registering for 17:013 for no credit, pass/fail; for each one (1) hour of verified work experience the student will receive two (2) hours of work experience credited to this requirement. May enroll in 17:013 until a maximum of 2,000 hours have been earned.
3. Student teaching in Office Education or an approved substitute.
4. Majors in Teacher Coordinator vocational certification programs must participate in co-curricular Office Education

Association (OEA) collegiate activities to expand their knowledge of the goals, objectives, and responsibilities of advising the vocational student organization.

D. Marketing and Distributive Education (provides certification as vocational teacher-coordinator) —

Required emphasis core: 17:014; 17:113; 17:119;
17:190 (Marketing Education I); 13:140; 18:130;
17:040 19 hours
Required: 6 hours from the following courses: 13:141;
13:147; 13:170; 13:151 6 hours

Other requirements:

1. 3,000 hours of work experience in distributive occupations approved by a distributive teacher educator for quality, recency, and diversity. (Up to 2,000 hours may be earned by registering for 17:013 - no credit, pass/fail; for each one (1) hour of verified work experience the student will receive two (2) hours of work experience credited to this requirement. May enroll in 17:013 until a maximum of 2,000 hours have been earned.)
2. Student teaching in distributive education or an approved substitute.
3. Student must pass department typing equivalency examination or pass 14:047 (Typewriting I, 2 hrs. credit).
4. Majors in Teacher Coordinator vocational certification programs must participate in co-curricular Distributive Education Clubs of America (DECA) collegiate activities to expand their knowledge of the goals, objectives, and responsibilities of advising the vocational student organization.

Expanded Career Option for Secondary Teacher Certification (Available to non-teaching business majors only.)

Majors in Accounting, Administrative Management, Marketing, and Management in the School of Business have the option of receiving secondary teaching certification and approval to teach in up to five (5) business areas. A student may complete this option by taking the required certifying courses as general university electives. The total number of hours required for certification will be between 27 and 38, depending upon the student's major and/or emphasis. All students receiving certification through the university must complete a minimum of 130 hours, including credit for American history or American government, and the approved Human Relations course. Specific certification requirements and information about this expanded career option may be obtained from the department head or a business education program adviser.

Administrative Management Major

Required: 12:030; 12:031; 13:152; 15:020; 18:070 or
15:080; 15:100; 15:151; 15:153; 15:154; 15:175;
92:053 33 hours
Required: 18:113; 18:117; 18:119; 18:120; 18:130; 18:160
..... 17 hours
Required: 9 hours from one of the concentrations listed
below 9 hours
59 hours

Concentrations:

1. **Accounting:** 12:129; 12:130; 12:131; 12:132; 12:134; 12:141.
2. **Marketing:** 13:140; 13:141; 13:151; 13:156; 13:170; 18:114; 17:040.
3. **Management:** 15:070; 15:102; 15:105; 15:107; 15:152; 15:161; 15:165.

4. **Personnel:** 15:070; 15:165; 15:166; 15:168; 31:050; 40:157; 40:158; 50:163; 18:114; 17:199; 50:183; 50:184.

5. **Administrative Assistant:** 14:058; 14:152; 18:114; 50:163.

Required on all concentrations: Students must pass departmental typing equivalency examination or complete either 14:050 (Typewriting II) or 14:051 (Typewriting III).

Students pursuing this major should plan to participate in the co-curricular activities of the Administrative Management Society UNI Collegiate Chapter.

A cumulative grade point average of 2.20 at UNI is required for graduation in this major.

Business Education Minor — Teaching

Required: 12:030; 12:031; 14:051; 14:060; 15:010; 15:100; 17:014; 18:070; 18:130; 17:190 (Typewriting, Basic Business/Consumer Economics, and Accounting/Data Processing) 30 hours

A student desiring a minor in Business Education must have the minor program approved by the Business Education adviser.

Business Communication Minor

This interdisciplinary minor is offered jointly by the School of Business and the College of Humanities and Fine Arts. It is under the jurisdiction of the departments of Business Education and Administrative Management, English Language and Literature, and Communication and Theatre Arts. The minor requires a 12-hour core plus six (6) hours from one of three emphases.

Required core: 50:138; 50:163; 62:104; 62:105 12 hours
Required: six (6) hours from one of three emphases 6 hours
18 hours

Emphases

Business: 18:113; 18:114.

English — two of the following: 66:102, 66:141; 66:150.

Speech: 50:183; 50:184; 50:185.

Students pursuing this minor should consider taking 50:026 and 62:003 as general electives.

Secretarial

14:012. Business Machines — Calculating — 2 hrs.

Electronic calculator operation with opportunity to develop skill through touch. Review of business mathematics and business applications. Class, 2 periods; labs., 2 periods arranged.

14:047. Typewriting I — 2 hrs.

Beginning courses for students with little or no previous typewriting instruction. Class, 2 periods; lab., 3 periods arranged.

14:050. Typewriting II — 2 hrs.

Techniques, speed, and control; office-type problems. Class, 2 periods; lab., 3 periods arranged. Prerequisite: 14:047 or one semester of high school typewriting or equivalent.

14:051. Typewriting III — 2 hrs.

Development of typing skills in specialized fields such as legal, medical, technical, government, and military; special work on executive-type problems. Required for approval to teach typewriting. Class 2 periods; lab 3 periods arranged. Prerequisite: 14:050 or one year of high school typewriting or equivalent. Recommended corequisite 14:060 for teaching majors.

14:056. Beginning Shorthand* — 4 hrs.

Shorthand system (*any system) to be indicated in the Schedule of Classes. Prerequisite: ability to type. Daily.

14:058. Advanced Shorthand/Transcription — 4 hrs.

Develops competency in taking dictation, but places a major emphasis on the development of transcription techniques and procedures. Prerequisite: 14:050 or equivalent; and 14:056.

14:060. Word Processing — 1 hr.

Development of word processing skills and techniques including machine dictation and transcription and the use of automated word processing equipment. Prerequisite: 14:050 or equivalent. Recommended corequisite 14:051 for teaching majors.

14:152. Executive Secretarial Procedures — 3 hrs.

Secretarial duties, responsibilities, and procedures. Finishing course for those planning careers in teaching or in secretarial work. Includes practical application of secretarial skills and knowledges. Prerequisite: 14:051 or equivalent.

Business Education

17:013. Coordinated Occupational Experience.

No credit-Pass/fail. Supervised occupational experience. Student receives two units of work experience for each one (1) hour of verified work experience to be credited toward the 3,000 vocational certification work experience units required. Maximum of 2,000 hours of work experience units may be earned through this course. Prerequisite: approval by a Vocational Teacher Educator. Corequisite: employment in approved occupation. May be repeated.

17:014. Foundations of Business and Vocational Education — 3 hrs.

Development of business and vocational education within framework of career education and the roles of teachers, administrators, and guidance personnel in these areas. Explores principles, practices, organizational patterns, contemporary issues, and teaching opportunities.

17:040. Personal Selling — 3 hrs.

A practical overview of the selling process. Topics include: the nature and role of sales, personal qualifications and responsibilities, the application of marketing concepts, sales techniques, and an introduction to sales management. Prerequisite: sophomore standing.

17:113(g). Administration of Vocational Education Programs — 3 hrs.

Objectives, operation, and coordination and vocational programs; emphasis on office and distributive occupations. Prerequisite: junior standing.

17:119(g). Curriculum Development in Business Programs — 3 hrs.

Advancement of major concepts, skills, and techniques for organizational development of occupation curriculum and instructional programs. Prerequisite: junior standing or consent of instructor.

17:170. Problems in Business Education — 1-3 hrs.

Credit determined at registration. Offered in areas indicated in the Schedule of Classes. May be repeated for a total of 6 hours. Designed for 9 weeks or one semester individualized study program. Prerequisite: consent of instructor.

17:190. Teaching Methods — 1 hr.

Students must earn credit in more than one area. Recommended for junior year. For teaching majors only. Prerequisite: 18:130.

17:207. Curriculum Development in Business and Vocational Education — 3 hrs.

History, present status, philosophy, trends, and factors of curriculum development in business education for junior high school, senior high school, and post-high school curriculums including vocational and non-vocational programs.

17:210. Measurement and Evaluation — 3 hrs.

Develops skills in the measurement and evaluation of business education subject areas. Includes procedures related to assessment, test construction, testing procedures, and data analysis.

17:212. Coordination Techniques — 2 hrs.

Responsibilities of cooperative vocational education teacher-coordinator in coordination theory and practice; role of coordination, on-the-job learning experiences, selection of training stations, developing training plans, placement of students on the job, and public relations activities. Prerequisites: 17:113 and teaching experience.

17:234. Philosophy of Business and Vocational Education — 2 hrs.

Philosophy, principles, and practices of business and vocational education.

17:240. Post-Secondary/Adult Programs — 3 hrs.

Planning, organizing, and administration of post-secondary and adult business education; teaching techniques, methods, materials, and resources appropriate for such programs.

17:245. Current Topics in Business Education — 2 hrs.

May be offered in different areas as indicated in the Schedule of Classes. Prerequisite: Teaching experience in area selected or consent of instructor.

17:280. Seminar: Business Education Policy — 2 hrs.

May be repeated for a maximum of 6 hours. Prerequisite: 16 hours completed in master's program.

17:285. Individual Readings — 1-2 hrs.

Directed readings and reports. May be repeated for a maximum of 4 hours. Prerequisite: consent of department head.

17:290. Improvement of Instruction in Business Education — 2-3 hrs.

17:297. Practicum — 2 hrs.

Prerequisite: consent of department head.

17:299. Research — 1-6 hrs.

Prerequisite: consent of department head.

Administrative Management

18:070. Basic Computer Concepts — 3 hrs.

Introduction to the techniques and procedures of data processing. Analysis and study of data processing systems, including punch card equipment and electronic computers. (Same as 15:080.)

18:113. Business Communications I — 3 hrs.

Basic written communication development through emphasis on writing skills used in business memorandums and letters; will incorporate skill development in listening and effective executive dictation techniques. Prerequisites: junior standing and passing of Writing Competency Examination.

18:114(g). Business Communications II — 3 hrs.

Communication theory as basis for understanding the principles of both written and oral communications. Includes written business reports and oral presentations. Prerequisites: 18:113; junior standing.

18:117(g). Administrative Office Management — 3 hrs.

Fundamentals of office organization and administration, office equipment, supplies, layout, cost control, personnel problems, job analysis, and job specifications. Prerequisites: 18:113; 15:153.

18:118(g). Adult/Continuing Business Education — 3 hrs.

The psychology of the adult learner; principles and practices of adult/continuing education; structuring education and training for the adult learner in a variety of institutional settings. Prerequisite: junior standing.

18:119(g). Administration of Human Resources — 3 hrs.

Fundamentals of supervision and human relations techniques with emphasis on development of administrative techniques of human resources. Prerequisite: junior standing.

18:120(g). Records and Information Management — 3 hrs.

Administrative responsibilities involved in control of business records from their creation to processing; storage systems approach to data storage systems involving use of mechanical, electronic, and photographic methods. Prerequisite: junior standing or consent of instructor.

18:130(g). Training and Staff Development — 3 hrs.

Fundamentals of training methodology, needs assessment, resource allocation, techniques of training, awareness and recognition of performance improvement, delivery and evaluation of training. Prerequisite: junior standing.

18:160. Administration of Word Processing — 2 hrs.

Theory of word-processing administration with emphasis on system design, implementation, and evaluation; selection, training, and evaluation of personnel; integration of word processing into larger information processing system.

18:169(g). Internship in _____ — 2-8 hrs.

Student to indicate topic when registering. Prerequisite: departmental approval.

18:179. Cooperative Education — 1-2 hrs.

Prerequisite: departmental approval. May be repeated for maximum of 2 hrs.

18:220. Business Report Writing — 3 hrs.

Emphasis on effective communication through writing and analyzing business reports. Includes data collection, instruments, analysis, formats, and styles. Prerequisite: 18:114 or consent of instructor.

18:289. Seminar: Administrative Management Policy — 1-3 hrs.

Should be taken in student's last semester of graduate study. Prerequisite: departmental approval.

18:299. Research.

Chemistry

L. McGrew, Head. Chang, R. Hanson, Lyon, Macmillan, Richter, Rider, W. Wehner, Wiley, Woo.

Note: It is strongly recommended that students considering a chemistry major consult the department head about the possibility of advanced placement or take 86:044 during the first semester of the freshman year.

Chemistry Major — Teaching

Required:

Chemistry — 86:044 and 86:048, or 86:070; 86:120; 86:121; 86:123; 86:132; 86:140 or 86:142	20-23 hours
Physics — 88:054 and 88:056; or 88:130 and 88:131	8 hours
Methods — 82:190; 86:193	4 hours
Electives: chemistry beyond 86:048 or 86:070	7-10 hours
	42 hours

Note: Student is advised to complete a minor in another science or in mathematics. The mathematics prerequisites for one or more of the above courses are 80:046 and 80:060. The required mathematics and physics courses should be completed by the end of the sophomore year.

Chemistry Major — A

Required:

Chemistry — 86:044 and 86:048, or 86:070; 86:120; 86:121; 86:123; 86:132; 86:134 or 86:135; 86:140; 86:141; 86:143	29-32 hours
Physics — 88:054 and 88:056; or 88:130 and 88:131	8 hours
Electives: chemistry or other sciences	6-9 hours
	46 hours

Note: The mathematics prerequisites for one or more of the above courses are 80:046, 80:060, and 80:061. A reading knowledge of a foreign language, especially German, is strongly recommended, particularly for those planning advanced study in chemistry.

Chemistry Major — B

Required:

Chemistry — 86:044 and 86:048, or 86:070; 86:120; 86:121; 86:123; 86:125; 86:132; 86:135; 86:140; 86:141; 86:143; 86:145	34-37 hours
Physics — 88:054 and 88:056; or 88:130 and 88:131	8 hours
*Additional advanced study, including at least one (1) hour of independent study or laboratory research in chemistry	8-11 hours
	53 hours

(*To be selected with the approval of the adviser and consistent with the guidelines for undergraduate programs in chemistry of the American Chemical Society.)

Note: The mathematics prerequisites for one or more of the above courses are 80:060 and 80:061. A reading knowledge of a foreign language, especially German, is strongly recommended, particularly for those planning advanced study in chemistry. Knowledge of computer programming is also desirable.

This major will meet the requirements specified by the American Chemical Society for an approved undergraduate major.

Chemistry — Marketing Major

This is an interdisciplinary major offered by the Department of Chemistry and the School of Business, and is under the jurisdiction of the Department of Chemistry. The Department of Chemistry is responsible for advising students enrolled in the major.

Required chemistry: 86:044 and 86:048, or 86:070; 86:120; 86:121; 86:123; 86:132; 86:142; 86:134 or 86:150	24-27 hours
Required business: 12:030; 12:031; 13:140; 13:151; 13:152; 13:175; 15:020; 15:070; 15:153	27 hours
	51-54 hours

Note: The mathematics prerequisite for one or more of the above courses is 80:046.

Chemistry Minor — Teaching

Required: 86:044 and 86:048; or 86:070; 86:050, or 86:120 and 86:123; 86:132; 86:142	16-21 hours
Required: 82:190; 86:193	4 hours
Electives from: 86:121; 86:134; 86:144; 86:186 (Studies in)	0-5 hours
	25 hours

Chemistry Minor

Required: 86:044 and 86:048; or 86:070	5-8 hours
Electives in chemistry beyond 86:048 or 86:070	12-15 hours
	20 hours

86:020. Chemical Technology — 4 hrs.

Basic concepts of inorganic and organic chemistry and their applications to industrial processes. Emphasis on application of chemical principles in materials and energy production and use, and environmental problems. Discussion, 3 periods; lab., 2 periods. No credit for student with credit in any college chemistry course.

86:030. Contemporary Chemical Issues — 3 hrs.

Basic concepts of chemistry and their applications to living systems and the problems of an industrial society. The work of the chemist and the interactions of chemistry with other activities of man. Discussion, 3 periods. No credit for student with credit in any college chemistry course. Recommended for General Education.

86:031. Socio-Economic Chemistry — 1 hr.

Chemical problems of current interest and concern affecting the individual and society (e.g., energy, pollution, food supply, drugs, etc.). Discussion, 1 period. Credit does not count on chemistry major or minor.

86:041. Introductory Physiological Chemistry — 3 hrs.

Inorganic, organic, and physiological chemistry for nurses in training. Discussion, 2 periods; lab., 2 periods.

86:044. General Chemistry I — 4 hrs.

Structure of matter, its physical properties and laws describing them, the periodic table and its relation to atomic structure and chemical properties, and non-metallic elements and their compounds. Students with extensive background in high school chemistry and mathematics may enter 86:070 following departmental advisement. Discussion, 3 periods; lab., 3 periods.

86:048. General Chemistry II — 4 hrs.

Continuation of 86:044 with emphasis on chemistry of non-metals, metals, chemical and ionic equilibrium, and separation and identification of ions. Discussion, 2 periods; lab., 6 periods. Prerequisite: 86:044 or equivalent. For pre-professional students and science majors with a special interest in chemistry. Others may enroll.

86:050. Bio-Organic Chemistry — 4 hrs.

Theoretical and practical consideration of chemical principles important in biological systems. Stresses instrumentation techniques for biologists and medically related fields. No credit for students with credit in 86:123. Discussion, 3 periods; lab., 3 periods. Prerequisite: 86:048 or 86:070.

86:061. Applied General Chemistry — 4 hrs.

Principles of chemistry as applied to the home and industry. For home economics students and non-science majors. Discussion, 3 periods; lab., 3 periods. No credit for student with credit in 86:044.

86:063. Applied Organic and Biochemistry — 4 hrs.

For home economic students and non-science majors. Prerequisite: 86:061 or equivalent. Discussion, 3 periods; lab., 3 periods. No credit for student with credit in 86:120.

86:070. General Chemistry I-II — 5 hrs.

Accelerated course for well-prepared students. Content similar to 86:044 and 86:048 but covered in one semester. Completion satisfies General Chemistry requirement of any chemistry major. Discussion, 4 periods; lab., 3 periods. Prerequisite: department advisement.

86:120. Organic Chemistry I — 3 hrs.

Fundamentals of organic chemistry. For majors in the sciences and those preparing for medically related careers. Prerequisite: 86:048 or 86:070. Discussion, 3 periods.

86:121. Organic Chemistry Laboratory I — 2 hrs.

Purification and identification techniques as well as some representative organic reactions. Prerequisite or corequisite: 86:120. Lab., 6 periods.

86:123. Organic Chemistry II — 3 hrs.

Continuation of 86:120. Prerequisite: 86:120. Discussion, 3 periods.

86:125. Organic Chemistry Laboratory II — 2 hrs.

Continuation of 86:121. Preparation and functional group analysis. Prerequisites: 86:120; 86:121. Prerequisite or corequisite: 86:123.

86:132. Quantitative Analysis — 4 hrs.

Theory, technique, and calculations of volumetric and gravimetric analysis. Statistical treatment of data. Classical analytical procedures supplemented by instrumental techniques. Prerequisite: 86:048 or 86:070. Discussion, 2 periods; lab., 6 periods.

86:134(g). Instrumental Analysis I — 4 hrs.

Instrumental methods of analysis. Theory of instrumentation and practical experience in such areas as potentiometric titration, polarography, electroanalysis, spectrophotometry, and gas chromatography. Prerequisite: 86:132. Discussion, 2 periods; lab., 6 periods.

86:135(g). Instrumental Analysis II — 4 hrs.

The application of physical chemical principles to theory and practice of instrumental methods of analysis such as spectrophotometric, electroanalytical, and chromatographic techniques. Prerequisites: 86:132 and 86:140. Prerequisite or corequisite: 86:141. Discussion, 2 periods; lab., 6 periods.

86:140(g). Physical Chemistry I — 3 hrs.

Application of the laws of physics to chemical phenomena. Prerequisite: 80:060, 88:056 or 88:131, or permission of the instructor. Discussion, 3 periods.

86:141(g). Physical Chemistry II — 3 hrs.

Continuation of Physical Chemistry I which is prerequisite. 80:061 is recommended as a prerequisite, but may be taken concurrently. Discussion, 3 periods.

86:142(g). Principles of Physical Chemistry — 3 hrs.

Physical aspects of chemistry for the needs of the high school chemistry teacher, and for students in the biological sciences. Prerequisite: 86:048 or 86:070; 80:046. Recommended: 88:054. Discussion, 3 periods.

86:143(g). Physical Chemistry Laboratory — 1-3 hrs.

Techniques of physical measurements related to chemistry. Prerequisites: 86:132 and 86:140; 86:141 may be taken concurrently. Meets 3 to 9 hours per week. Chemistry A and B majors should take at least two hours credit. Those with credit in 86:142 may take one hour credit.

86:144(g). Inorganic Chemistry I — 3 hrs.

The structure of elements and their consequent physical and chemical properties and their relations to the periodic chart. Prerequisite: 86:120. Discussion, 3 periods.

86:145(g). Inorganic Chemistry II — 3 hrs.

Application of physical chemical principles to the study of inorganic systems. Prerequisite: 86:120, 86:140. Prerequisite or corequisite: 86:141. Discussion, 3 periods.

86:147(g). Inorganic Chemistry Laboratory — 1-3 hrs.

Preparation, analysis, and study of the properties of inorganic compounds. Prerequisite: 86:134 or 86:135. Prerequisite or corequisite: 86:141; 86:144 or 86:145.

86:150(g). Biochemistry I — 4 hrs.

Chemistry of life processes with emphasis on metabolism. Prerequisite: 86:123. Discussion, 2 periods, lab., 6 periods.

86:151(g). Biochemistry II — 4 hrs.

Chemistry of life processes based on physical chemical principles. Prerequisites: 86:125; 86:140. Prerequisite or corequisite: 86:134 or 86:135; 86:141. Discussion, 2 periods, lab., 6 periods.

86:161(g). Organic Structure Analysis — 3 hrs.

Use of infrared and ultraviolet-visible spectroscopy, proton and carbon magnetic resonance, mass spectrometry, and other physical and chemical methods for the assignment of structure to organic compounds. Prerequisites: 86:123; 86:140. Prerequisite or corequisite: 86:141. Discussion, 3 periods.

86:180. Undergraduate Research in Chemistry — 1-3 hrs.

Credit determined at registration. May be repeated only once for credit. Prerequisite: 86:140 and approval of department head. Prerequisite or corequisite: 86:141.

86:193(g). Current Curricula in Chemistry — 2 hrs.

Philosophy, methods and materials of secondary school chemistry curricula, including CHEM Study, IPS (Introductory Physical Science), PACE Chemistry, and other innovations in the teaching of chemistry. Discussion, 2 periods; lab., 2 periods. Prerequisite: 82:190.

86:220. Advanced Organic Chemistry — 3 hrs.

Product analysis, kinetics, and mechanism of organic reactions. Prerequisites: 86:123; 86:141. Discussion, 3 periods.

86:230. Coordination Chemistry — 3 hrs.

Lecture course on various aspects of coordination compounds. Prerequisite: 86:141; 86:144 or 86:145.

86:235. Molecular Structure — 3 hrs.

Lecture course on wave mechanics as applied to atomic and molecular structure, with emphasis on experimental spectroscopy. Prerequisites: 80:061; 88:054; 88:056; 86:141.

86:240. Special Problems in Chemistry — 1-6 hrs.

Credit determined at registration. Problems selected according to needs of students. Prerequisite: departmental approval.

86:242. Advanced Analytical Chemistry — 3-4 hrs.

A theoretical and practical consideration of the problems of separation and measurements in analytical chemistry. Discussion, 3 periods; lab., 3 periods; lecture may be taken without the laboratory. Prerequisites: 86:132; 86:140; and approval of department head.

86:292. Research Methods and Chemical Literature — 3 hrs.

Concepts and procedures for developing a chemical research problem; use and importance of the chemical literature.

Communication and Theatre Arts

Hall, Head, Bozik, Carlin, Carlisle, Caspers, Colburn, R. Conkitt, Edelnant, Gilbertson, Glenn, Hardeman, Henderson, Hurst, M. Jensen, Kruckeberg, Lenihan, McEndree, C. Nelson, N. Phillip, B. Renz, M. Renz, Risch, Rose, Scholz, Skaine, Sweet, Walsh.

Note: Students must achieve a minimum grade of C (2.0) in all courses to be applied toward departmental majors or minors. Grades achieved less than a 2.0 will require a repeat of the course with satisfactory completion a minimum earned grade of C.

General Communication and Theatre Arts Major — Teaching

Required public address: 50:030; 50:139; 50:144	9 hours
Required theatre: 50:046; 50:047	6 hours
Required oral interpretation: 50:031; 50:114	6 hours
Required interpersonal communication: 50:035; 50:094; 50:164	5 hours
Required broadcasting: 50:072	3 hours
Required: 50:193; 50:194; 50:196	7 hours
Required: one hour from 50:010; 50:011; 50:015; 50:110; 50:111; 50:115	1 hour
	37 hours

Students who choose this major must also complete a teaching minor.

Communication and Theatre Arts Major — Teaching

Required: 50:030; 50:031; 50:035; 50:046*; 50:047**; 50:094; 50:144; 50:193	20-21 hours
Plus one of the following emphases for	15-18 hours
	35-39 hours

*Majors with Theatre Emphasis must substitute 50:053.

**Majors with Theatre Emphasis must substitute 50:025.

Emphases:**Interpersonal Communication —**

Required: 50:164	3 hours
Electives: minimum of 6 hours from — 50:102; 50:136; 50:137; 50:138; 50:139; 50:143; 50:162; 50:165	6-12 hours
Electives: maximum of 6 hours from — 29:102; 29:121; 63:158; 31:051; 31:057; 31:152; 40:157; 45:163; 98:100	0-6 hours
	15 hours

Interpretation —

Required: 50:055; 50:112; 50:113; 50:114	11 hours
Required: 50:198 or 50:132	1 hour
Required: 50:122 or 50:123 or 50:124 or 50:116	3 hours
	15 hours

Public Address —

Required: *50:030 or 50:139	3 hours
Required: 50:011 or 50:111 or 50:198	1 hour
Electives: (at least 6 hours must be 100-level) from: 50:011 or 50:111; 50:018; 50:032; 50:060; 50:100; 50:131; 50:136; 50:140; 50:143; 50:145; 50:164; 50:165; 50:187; 50:188; 50:194	11-12 hours
	15-16 hours

(*Both 50:030 and 50:139 are required to complete the major with this emphasis.)

Theatre —

Required: 50:045; 50:052; 50:055; 50:082; 50:148; 50:050 or 50:114 or 50:130	18 hours
---	----------

Students who choose this major must also complete a teaching minor.

Communication and Theatre Arts Major

Required: courses in speech (excluding 50:020, 50:026, 50:031, 50:034, 50:130, 50:139, 50:193, 50:194, 50:196)	36 hours
--	----------

In consultation with an adviser, specific major requirements should be designed around the student's career objective or specific area of study. At least twelve (12) hours must be taken from 100-level speech courses. A maximum of nine (9) hours may be taken from non-departmental courses. The program of study requires the written approval of the student's academic adviser and by a standing committee of three.

A copy of the approved major program will be filed with the department and the Office of the Registrar.

A minor is strongly recommended.

Communications/Public Relations Major

Required: 12:030; 13:140; 13:147; 13:152; 13:171; 15:153; 24:131; 60:025 or 33:155; 66:032; 66:040	30-31 hours
Required: 50:035; 50:077; 50:138; 50:161; 50:163; 50:164; 50:177	19 hours
Electives: based on the specific interest of the student and taken from list below*	8-9 hours
	58 hours

*Electives: 13:151; 13:174; 13:175; 15:020; 15:070;
24:138; 24:147; 33:169; 50:017; 50:030; 50:060;
50:072; 50:131; 50:136; 50:137; 50:140; 50:165;
50:168; 50:178; 50:179; 50:183; 50:184; 50:185;
50:197; 60:032; 60:125; 60:126; 62:070; 66:102;
66:132; 66:140; 66:141; 66:150.

A typing proficiency of 30 words per minute is recommended; 14:047 (Typewriting I) may be taken to meet this recommendation but will not count toward the major.

A journalism minor is strongly recommended.

Communications/Radio-TV Major

Required: 50:018; 50:031 or 50:032 or 50:055; 50:060; 50:061; 50:072; 50:120; 50:161; 50:170 ..	27-28 hours
Electives: minimum of nine hours from research/ criticism/policy area: 50:075; 50:127; 50:165; 50:172; 50:174; 50:175; 66:132	9 hours
and maximum of 8-9 hours from production/ performance area: 24:031, 24:147, 24:152, 24:155, 50:009, 50:031 or 50:032 or 50:055 if not chosen as a required course, 50:050, 50:113, 50:121, 50:169, 50:171, 50:173, 66:040	8-9 hours
	45 hours

Theatre Arts Major

Required: 50:021; 50:022; 50:025; 50:027; 50:045; 50:050; 50:052; 50:053; 50:055; 50:082; 50:147; 50:148	36 hours
Required: One of the options* below for a total of ...	21-22 hours
	57-58 hours

*General option: 21 hours from theatre courses.

*Acting option: 50:024; 50:080; 50:126; 50:149;
50:181; 50:182; 42:001 (Beginning Ballet); 54:049
(2 hrs.) or 54:049 (1 hr.) and 54:046 (1 hr.);
50:195 (1 hr.)

Communication and Theatre Arts Minor — Teaching

Required: 50:030; 50:031; 50:035; 50:046; 50:047; 50:094; 50:144; 50:193	20 hours
Elective: 100-level departmental course	3 hours
	23 hours

Communication and Theatre Arts Minor

Required: Elective courses* in speech	18 hours
*Excluding: 50:020, 50:026, 50:031, 50:034, 50:139, 50:193, 50:194, and 50:196.	

Specific requirements for this minor should be designed, in consultation with a departmental adviser, for a specific objective or area of study. At least 12 semester hours must be taken in 50:xxx courses. The minor program requires the written approval of the adviser and a departmental standing committee. A copy of the program will be filed with the department and the Office of the Registrar.

Business Communication Minor

This interdisciplinary minor is offered jointly by the College of Humanities and Fine Arts and the School of Business. It is under the

jurisdiction of the departments of English Language and Literature, Business Education and Administrative Management, and Communication and Theatre Arts. The minor requires a 12-hour core plus six (6) hours from one of three emphases.

Required core: 50:138; 50:163; 62:104; 62:105 12 hours
 Required: six (6) hours from one of three emphases 6 hours
 18 hours

Emphases —

Business: 18:113; 18:114

English: two of the following — 66:102; 66:141;
 66:150

Communications: 50:183; 50:184; 50:185.

Students pursuing this minor should consider taking 50:026 and 62:003 as general electives.

Applied Speech

A student may earn a maximum of four (4) semester hours of credit applicable toward a baccalaureate degree for participation in Theatre, Forensics, or Broadcasting, or in a combination of Theatre, Forensics, and Broadcasting. Permission for credit is determined by the director of the activity. Not more than one (1) hour may be earned in one semester. Credit is not available in the summer.

50:009; 50:109(g). Applied Broadcasting — 1 hr.

Credit available for qualified students who work on campus radio station, KCRS, and/or on other authorized Radio/TV/Film projects. A maximum of 4 hours credit may be earned. Prerequisite: instructor's approval.

50:010; 50:110(g). Applied Theatre — 1 hr.

Practical work on theatre productions. A maximum of 4 hours credit may be earned.

50:011; 50:111(g). Applied Forensics — 1 hr.

A maximum of 4 hours credit may be earned.

50:015; 50:115(g). Applied Interpretation — 1 hr.

Credit for approved work in interpretation (e.g., participation in Interpreters Theatre, performance in community, campus, or festival settings, or related activity). Maximum of 4 hours credit may be earned. Prerequisite: consent of instructor.

50:017; 50:117(g). Applied Public Relations — 1 hr.

Credit for approved work in public relations (e.g., problems of campaign on campus or in the community). Maximum of 2 hrs. credit. Prerequisites: consent of instructor; and junior standing for 50:117.

50:018. Radio Production and Performance — 3 hrs.

Introductory course in performance and production with emphasis on radio. Prerequisites: 50:031 or 50:032 or 50:055 and 50:060 or junior standing.

50:020. Introduction to Theatre — 3 hrs.

The place of theatre and drama in the life of man, with a critical appreciation of the various arts and skills involved. Emphasis on the creative function of the audience.

50:021. Play Analysis for Production I — 3 hrs.

Analysis of dramatic forms and styles in preparation for production.

50:022. Play Analysis for Production II — 3 hrs.

Readings and analysis of plays (Greek to the present) in preparation for production. Prerequisite: 50:021.

50:024. Movement for the Actor — 3 hrs.

A beginning exploration of movement for the stage. Discussion, 3 periods; lab., 3 periods.

50:025. Directing I — 3 hrs.

Analysis of plays and fundamentals of directing. Prerequisite: 50:053.

50:026. Fundamentals of Speech — 3 hrs.

Concepts and processes involved in speech communication with emphasis on, but not limited to, public speaking. Designed for individual who has little training in speech communication.

50:027. Makeup — 2 hrs.

Basic techniques and materials of makeup for the stage. Discussion, 1 period; lab., 2 periods.

50:030. Public Speaking — 3 hrs.

Application of the principles of psychology, sociology, political science, and composition to situations confronting the public speaker. Prerequisite: 50:026 or equivalent.

50:031. Oral Interpretation — 3 hrs.

Introduction to the analysis and presentation of poetry, prose and drama.

50:032. Voice and Diction — 3 hrs.

Study and practice in voice and diction to develop superior vocal and articulatory skill.

50:034. Human Communication — 3 hrs.

Explanation and experiences in forms, potentials, and problems of human expression. Discussion, 3 periods.

50:035. Problems in Interpersonal Communication — 1 hr.

Experiences and insight into one-to-one human communication.

50:045. Stage Costume — 4 hrs.

Techniques of costume production for the theatre including the basic design and construction methods, and painting, dyeing, and developing patterns for period costumes. Requires work on crew for current department productions. Discussion, 3 periods; lab., 4 periods.

50:046. Elements of Dramatic Production I — 3 hrs.

Fundamentals of acting and directing. Discussion, 3 hrs., lab., 3 hrs. arranged. Not open to speech majors with theatre emphasis.

50:047. Elements of Dramatic Production II — 3 hrs.

Introductory survey of theatre production including stagecraft, scenic, lighting, makeup, and costuming technology and design. Discussion, 3 hrs., lab., 3 hrs. Not open to speech majors with a theatre emphasis.

50:050. Acting I — 3 hrs.

Fundamentals of acting, stressing the basic skills and techniques of character analysis and interpretation, culminating with elementary scene work. Discussion, 3 periods; lab., 3 periods.

50:051. Theatre Graphics I — 3 hrs.

Fundamentals of graphics for theatre technology. Laboratory, 4 hours., lab. fee.

50:052. History of the Theatre I — 3 hrs.

Examination of plays, production methods, and historical trends in the theatre from the beginnings to the Restoration.

50:053. Technical Theatre I — 4 hrs.

Fundamentals of scenery construction, painting and handling, and lighting for the theatre. Requires work on technical crews for current department productions. Discussion, 3 periods; lab., 4 periods.

50:055. Performing Voice — 2 hrs.

Practical work in developing the voice for performance situations.

50:060. Fundamentals of Broadcasting — 3 hrs.

Survey of development and organizations of the radio-television industry.

50:061. Television Production I: Studio Performance — 4 hrs.

Studio experiences in directing and producing television programs. Discussion, 2 periods; lab., 4 periods. Prerequisites: 50:018; 50:161; and at least junior standing.

50:062. Television Performance — 3 hrs.

Development of understanding and skills needed for effective television performance. Discussion, 2 periods; lab., 3 periods. Prerequisite: 50:018.

50:072. Beginning Film Production — 3 hrs.

Production techniques and creative processes of film making.

50:075. Silent Film History — 3 hrs.

Development of professional motion picture production from beginning to the sound era through an examination of selected films, research, lectures and discussion. Prerequisite: 50:072 or instructor's approval.

50:077. Principles of Public Relations — 3 hrs.

Historical review of the public relations industry, government, institutions, and the local agency; emphasis on principles, policies, and practice.

50:080. Acting II — 3 hrs.

Application of the skills and techniques of Acting I to more advanced work in sub-text and the internal process of acting using extensive scene work in realistic drama. Discussion, 3 periods; lab., 3 periods. Prerequisite: 50:050 or consent of instructor.

50:082. History of the Theatre II — 3 hrs.

Examinations of plays, production methods, and historical trends in the theatre from the Restoration to 1900. Prerequisite: 50:052.

50:093. How to Write A Research Paper in Speech — 1 hr.

Introduction to the literature and materials of the discipline, basic research techniques and the writing of research papers.

50:094. Instructional Approaches to Interpersonal Communication — 1 hr.

Theoretical basis, ethical considerations, and resources for teaching interpersonal communication in the public schools. Prerequisite: 50:035.

50:100(g). Rhetorical Theory — 3 hrs.

A systematic examination of rhetorical theory and its place in spoken and written discourse; development of an understanding of the functions of rhetoric; and an introduction to terms and concepts of rhetorical theory.

50:101(g). Communication in Education — 2-3 hrs.

Exploration of new methods and avenues of communication in teaching. Offered opposite student teaching. May not be counted in meeting requirements of a major or minor in Speech.

50:102(g). Non-Verbal Communication — 3 hrs.

Patterns of human expression apart from the spoken or written word.

50:105(g). Freedom of Speech — 3 hrs.

Development of laws and social attitudes that have attempted to regulate communication in the United States; relation of free speech to national security, to regulation of the public forum, and to artistic expression; and analysis of doctrines and tests used by the Supreme Court in interpreting the limits to free expression. Prerequisite: junior standing.

50:107(g). Costume History — 3 hrs.

Survey of fashion history concentrating on Europe and the United States. Discussion, 3 periods. Prerequisites: 50:045; junior standing or consent of instructor.

50:112(g). Advanced Interpretation of Poetry — 3 hrs.

Analysis of the meaning and structure of poetry and application of the analysis in the oral communication of poems by selected writers. Prerequisite: 50:031.

50:113(g). Advanced Interpretation of Prose — 3 hrs.

The meaning and structure of narrative prose and application of analysis in the oral communication of prose fiction. Prerequisite: 50:031.

50:114(g). Readers Theatre — 3 hrs.

Introduction to basic forms of staging and adapting poetry, prose, and drama with emphasis on directing group presentations. Includes work in chamber theatre. Prerequisite: 50:031.

50:116(g). Performance in Social Contexts — 3 hrs.

Group and solo interpretation in nontraditional settings, including business, hospitals, and organizations. Methods of audience analyses, script selection, and adaptation for various social contexts. Prerequisite: junior standing; 50:031 or consent of instructor.

50:120. Broadcast Management — 3 hrs.

Technical, financial, and organizational information about educational and commercial broadcasting and cable television. Prerequisites: 50:060 and at least junior standing.

50:121. Television Production II: Remote Production — 4 hrs.

Experience in producing and directing multiple and single camera remote television productions. Discussion, 1 period; lab., 5 periods. Prerequisites: 50:061; 50:062; 50:072.

50:122(g). Interpretation of Drama — 3 hrs.

Analysis of meaning, language, and structure of dramatic literature and application of analysis to oral performance of dramatic works by selected authors. Prerequisites: 50:031; junior standing or consent of instructor.

50:123(g). Interpretation of Folk Literature — 3 hrs.

Performing folk literature through group and individual interpretation; investigating narrative form, audience context, mythic motif, character development in the folk text. Field research and performance opportunities explored. Prerequisites: 50:031; junior standing or consent of instructor.

50:124(g). Interpretation of Literature through Electronic Media — 3 hrs.

Use of electronic media (radio, television, film) as aids in the study of literature. Familiarity with one of the three media forms recommended. Prerequisites: consent of instructor; junior standing.

50:125(g). Readings in Interpretation — 1-3 hrs.

Extensive individual study of special topic in interpretation theory, history, or research. Prerequisites: consent of instructor; junior standing.

50:126. Voice and Movement for the Actor — 3 hrs.

Intermediate work in voice and movement designed to free the natural responsiveness of the actor. Discussion, 3 periods; lab., 3 periods. Prerequisites: 50:024; 50:055.

50:127. Television and Human Behavior — 3 hrs.

Psychological and social effects of television on children and adults; review of research literature. Prerequisite: 50:060 and junior standing.

50:128(g). Language and Communications — 3 hrs.

Language and communication theories, including sociolinguistics, general semantics, and language acquisition. Prerequisite: junior standing or consent of instructor.

50:129(g). Oral Interpretation of Children's Literature — 3 hrs.

Interpretation through story telling, oral reading, choral reading, narrative pantomime, and reader's theatre; emphasis on personal skills and techniques appropriate for elementary classroom use. Corequisite: 21:044 or consent of instructor.

50:130(g). Creative Dramatics for Children — 3 hrs.

Prepares students to guide children in creative drama. Study of the art of spontaneous drama as it relates to the development of the child.

50:131(g). Speech Composition — 3 hrs.

Composition and presentation of manuscript speeches with special emphasis on style and attention to rhetorical examples and methods of criticism. Prerequisite: 50:030.

50:132(g). Readers Theatre Production — 1 hr.

Advanced problems in preparing scripts and directing readers theatre for public performance. Usually involves directing a readers theatre production. Prerequisites: 50:114; consent of instructor.

50:134(g). Theatre for Children — 3 hrs.

Specific problems of producing theatre for children, including readings in children's literature, child psychology, and plays. Practical experience in improvised and scripted performances.

50:135(g). Creative Drama Practicum — 3 hrs.

Experience in learning to adapt materials for spontaneous drama and experiment with techniques of guidance in an actual classroom situation, under the supervision of the classroom teacher and the instructor of the course. Prerequisite: 50:130.

50:136. Psychology of Speech Communication — 3 hrs.

Selected psychological views of speech communication. Topic emphasis based on professional interest of class.

50:137(g). Communication Theories — 3 hrs.

Investigation of concepts offered by various theorists to explain human communication behavior.

50:138(g). Organizational Communication — 3 hrs.

Study of communication channels and patterns which occur in large organizations where personnel are largely interdependent.

50:139. Principles of Discussion — 3 hrs.

Principles of small group speech communication with emphasis on the experience in task/decision oriented groups.

50:140(g). Persuasion — 3 hrs.

Examination of relationships between speech communication and change in belief/action patterns; emphasis on study of drives, motives, and attitudes as these are influenced by speech. Prerequisite: 50:030.

50:143(g). Advanced Discussion — 3 hrs.

Explores problems involved in small group discussion through examination of reported experiments and literature in the field. Prerequisite: 50:139.

50:144. Debate — 3 hrs.

Examination in detail of theories of argumentation and debate, emphasizing evidence and reasoning. Prerequisite: 50:026 or equivalent.

50:145(g). Argumentation — 3 hrs.

Advanced study in theory and methods of argumentation. The student will study the ethical, logical, and evidential contributions of various authors to argumentation theory.

50:146(g). Theatre for Children Tour — 3 hrs.

Specific problems of creating and performing a touring show for child audiences examined through practicum experience. Includes research, planning rehearsal and performance, and evaluation. Prerequisite: junior standing or consent of instructor.

50:147(g). History of the Theatre III — 3 hrs.

Examination of plays, production methods, and historical trends in the theatre from 1900 to the present.

50:148(g). Theatre Aesthetics — 3 hrs.

Theories of the theatre arts. Prerequisites: 50:021; senior standing.

50:149(g). Acting Characterization — 3 hrs.

Development of methods for creating a distinct stage personality for variety of characters. Discussion, 3 periods; lab., 3 periods. Prerequisites: 50:021; 50:024; 50:055; 50:080; junior standing and consent of instructor.

50:151. Theatre Design I — 3 hrs.

Design theory and techniques as applied to the theatre. Analysis of selected scripts and development of designs in scenery and/or costuming. May be repeated for maximum of 6 hours. Prerequisites: 50:021; 50:045; 50:051.

50:152(g). Directing II — 3 hrs.

Advanced problems in directing. Each student will stage a one-act play for presentation. Discussion, 3 periods; lab., 3 periods. Prerequisites: 50:021; 50:025.

50:156. Theatre Lighting Technology — 2 hrs.

Lighting instrumentation, control devices, distribution systems, lenstrains, and mechanics. Discussion, 2 periods; lab., 2 periods. Prerequisites: 50:021; 50:051; 50:053.

50:157(g). Stage Costume II — 3 hrs.

Pattern drafting techniques for theatrical costumes, and special construction problems. Discussion: 3 periods. Prerequisite: 50:045 or consent of instructor.

50:160(g). Playwriting — 3 hrs.

Prerequisite: 50:022; consent of instructor.

50:161. Radio-Television Writing — 3 hrs.

Writing for broadcast purposes, covering continuity, advertising, news, news analysis, documentaries, and special features. Prerequisite: 50:018; 62:003 or consent of instructor.

50:153(g). Business and Professional Oral Communication — 3 hrs.

Communication concepts and techniques for reporting and persuasive presentations in decision making situations.

50:164(g). Dimensions of Interpersonal Communication — 3 hrs.

Bases, applications, and implications of interpersonal communication. Prerequisite: 50:034 or 50:035.

50:165(g). Experimental Research in Speech — 3 hrs.

Introduction to research studies and quantitative research procedures. Three emphasis areas: (1) Communications; (2) Persuasion; (3) Theatre. Credit may be earned by taking different sections, but not by repeating the same section.

50:166(g). Advanced Scene Design and Technology — 3 hrs.

Advanced work to meet needs of the multi-set show, designing for non-traditional forms, advanced problems in script interpretation, and rendering techniques. Technical solutions and problem solving emphasizing new technology. Discussion, 1 hr.; lab., 2 hrs. Prerequisite: junior standing and 50:167.

50:167(g). Theatre Design II — 3 hrs.

Advanced problems and projects in design in one area: scenery, costume, or lighting. Discussion, 2 periods; lab., 2 periods. May be repeated in different areas for a total of 9 hours. Prerequisites: 50:151; 50:156.

50:168(g). Theatre Management — 3 hrs.

An intensive study of business practices in the academic, community, and commercial theatre. Field trips and guest lectures to be included.

50:169. Radio-Television Internship — 1-6 hrs.

Intensive experience in a campus or community radio-television facility. Prerequisite: departmental approval.

50:170. Broadcast Programming — 3 hrs.

The process of programming for both radio and television stations (commercial and public) with emphasis on local broadcast stations, network and cable programming. Prerequisite: 50:060.

50:171(g). Script Writing — 3 hrs.

Script models, writing styles and production problems for audio, film multi-image, and video. Prerequisites: Pass on Writing Competency Examination and completion of 100-level writing course; junior standing.

50:172. Television/Film Documentary — 3 hrs.

The form and content of the documentary through analysis of historical and contemporary examples, and actual documentary production. Prerequisites: 50:061; 60:072.

50:173. Radio-TV Sportscasting — 1 hr.

Preparation, production, programming, and performance of sporting event. Includes weekly seminar and "live" broadcasting sessions on KCRS. Students must be available to attend UNI sports events. May be repeated for maximum of 6 hours credit; each unit devoted to single sport. No single unit may be repeated for credit. Prerequisite: consent of instructor.

50:174. History and Regulation of Broadcasting — 3 hrs.

Historical development of broadcasting regulation, networks, stations, programming, and economics in the U.S.A. and a review of the current system of broadcasting regulation. Prerequisites: 50:060; junior standing.

50:175. Seminar in Broadcasting Studies — 3 hrs.

Specialized areas of broadcasting; topics to be announced in semester Schedule of Classes. May be repeated for maximum of 6 hours credit. Prerequisite: senior standing and consent of instructor.

50:177(g). Public Relations: Cases and Studies — 3 hrs.

Analysis of selected cases and their ethical implications; design and simulation of particular public relations campaigns conducted by students enrolled. Prerequisite: junior standing or consent of instructor.

50:178. Publicity Methods — 3 hrs.

Analysis and production of public relations tools; techniques to gain reaction and support from specialized groups. Includes planning and preparation of public relations communications materials and use of controlled (public) media to reach target audiences.

50:180(g). Scene Painting — 3 hrs.

Practicum in traditional scenic art, covering base coating, scumbling, stenciling, texturing, and the use of bronze powder, varnish, aniline, dyes, and a variety of other techniques and materials. Lab., 8 periods; lab. fee. Prerequisite: 50:051 or consent of instructor.

50:181(g). Acting Styles — 3 hrs.

Application of techniques learned in Acting I and II including theoretical study of various styles of acting as well as extensive scene work. Discussion, 3 periods; lab., 3 periods. Prerequisites: junior standing; 50:021; 50:024; 50:055; 50:080; and consent of instructor.

50:182(g). Stage Weapons and Fight Choreography — 3 hrs.

Basic skills of modern and historic styles of fencing, swordplay, and other modes of fighting, and application of these skills to the planning and safe execution of an effective and artistic stage fight.

50:183(g). Interviewing — 2 hrs.

The interviewer and interviewee functions in business and professional settings; excludes journalistic interviews. Prerequisite: junior standing.

50:184(g). Conference Techniques — 2 hrs.

Conference processes in business and professional settings with emphasis on problem solving and presentational speaking. Prerequisite: junior standing.

50:185(g). Negotiation Processes and Techniques — 2 hrs.

Examination of negotiation as it affects individuals in the life experience, and techniques for development of bargaining abilities. Prerequisite: junior standing.

- 50:187(g). Contemporary Public Address — 3 hrs.**
Critical study of subject with emphasis on important American statesmen after World War II.
- 50:188. Parliamentary Procedure — 2 hrs.**
Study of the rules of order which govern the proceedings of organizations in a democratic society.
- 50:189(g). Readings in Theatre — 3 hrs.**
Intensive investigation of a theatre style, form, period, or concept. May be repeated for a maximum of 6 hours. Prerequisite: instructor approval.
- 50:190(g). Theatre Graphics II — 3 hrs.**
Introduction to design techniques and media including chiaroscuro, perspective, color, and figure drawing. Lab., 4 hours. Prerequisite: 50:051.
- 50:191(g). Technical Theatre II — 3 hrs.**
Advanced studies in theatre technology: problem solving — complex structures, hidden construction, scene shifting and rigging. Discussion, 3 periods. Prerequisites: 50:051; 50:053; 50:151; or consent of instructor.
- 50:192. Seminar in Student Teaching — 1 hr.**
Discussion of problems and advantages encountered in the student teaching experience. Evaluation of current speech programs. To follow student teaching.
- 50:193(g). Teaching of Speech — 3 hrs.**
Credit also as a course in education for a student whose major is speech. Prerequisite: 12 hours of speech. Strongly recommended that this course precede student teaching.
- 50:194(g). Method of Directing Forensics — 2 hrs.**
Credit also as a course in education for a student whose major is speech.
- 50:195(g). Theatre Production — 1-4 hrs.**
Assumption of a major production responsibility under supervision of faculty. Lab., 2 hrs. May be repeated in various production areas for a maximum of four credit hours. Prerequisite: consent of instructor.
- 50:196(g). Methods of Teaching Theatre in High School — 2 hrs.**
Theory for teaching theatre in the secondary school; practical experience in techniques for teaching, directing, and relating theatre to high school students. Highly recommended before student teaching. Credit also as course in education for student whose major is speech. Prerequisite: consent of instructor and 12 semester hours of speech.
- 50:197(g). Internship in Speech and Theatre — 1-8 hrs.**
Intensive work in specialized area at an off-campus theatre. Limited to advanced students. Prerequisite: consent of department head.
- 50:198. Independent Study**
- 50:205. Interpersonal Communication — 3 hrs.**
Synthesis of psychological, sociological, philosophical analysis of person-to-person communication.
- 50:212. Speech Criticism — 3 hrs.**
Comparison of theories of criticism and their application to selected speeches.
- 50:225. Bibliography and Methods of Research — 3 hrs.**
- 50:230. Psychology of Speech — 3 hrs.**
The analysis of speech communication as a behavior phenomenon. Topic emphasis to be used on professional interest of class. Prerequisite: consent of instructor.
- 50:240. Classical Rhetoric — 3 hrs.**
Ancient rhetorical theory; emphasis on works of Aristotle, Cicero, and Quintilian.
- 50:241. British and American Rhetoric — 3 hrs.**
Rhetorical trends from 17th century to the present; examination of works of major rhetoricians.
- 50:242. British and American Public Address — 3 hrs.**
Study of major speakers and movements. Offered in three sections.
(1) British Public Address
(2) American Public Address to 1865
(3) American Public Address, 1866 to the Present.
Additional credit may be earned by taking different sections, but not by repeating the same section.

- 50:273. Projects in Speech — 1-3 hrs.**
May be repeated for a total of 3 hours credit. Approval of departmental committee must be obtained before registration.
- 50:289. Seminar in Teaching Speech — 3 hrs.**
Emphasis on (1) problems related to organizing and teaching speech courses in the public schools, (2) directing of extra-curricular speech activities, and (3) teaching speech at the college level. May be repeated for a maximum of 6 hours.
- 50:289. Seminar in Public Address — 3 hrs.**
Class interest determines whether the emphasis will be upon (1) persuasion, (2) rhetoric, or (3) debate and discussion. May be repeated for a maximum of 6 hours.
- 50:289. Seminar in Interpretation — 3 hrs.**
Section 1. Interpretation of literary styles; critical and historical perspectives. Section 2. Interpretation theories and research with application to teaching. Section 3. Advanced study of interpretation performance, directing, and/or coaching. May be repeated for a maximum of 9 hours; no section may be repeated.
- 50:289. Seminar in European Theatre — 3 hrs.**
Specialized study in some aspects of European theatre history and dramatic literature. Prerequisite: 50:142.
- 50:289. Seminar in American Theatre — 3 hrs.**
Specialized study in some aspects of American theatre history and dramatic literature. Prerequisite: consent of instructor.
- 50:289. Seminar in Stage Interpretation of Selected Plays — 3 hrs.**
Specialized study of prompt-scripts and stage histories of selected plays. Prerequisite: consent of instructor.
- 50:299. Research.**

Communicative Disorders

Bernthal, Head, Beykirch, Boots, R. Eblen, Hageman, J. Harrington, Highnam, Plakke, R. Schwartz.

Speech-Language Pathology Major — Teaching

Recommendation for certification is made only upon completion of the graduate program described on page

Required: 51:010; 51:105; 51:106; 51:111;	
51:125; 51:127; 51:135; 51:150; 51:155;	
51:156; 51:157; 51:165; 51:195; plus 3 hours	
of departmental electives	42 hours
Required in physics: 88:008	3 hours
Required in educational psychology: 25:180	3 hours
	48 hours

The completion of the undergraduate major or its equivalent will be considered adequate preparation for the graduate portion of the program. Deficiencies in undergraduate preparation must be made up before the student can begin his or her graduate sequence in speech-language pathology.

Students must receive a grade of C or better in required courses offered by the Department of Communicative Disorders in order to receive credit toward the major. Students must repeat any major course (other than 25:180 and 88:008, or equivalent) for which they receive a C- or less. Any one course may be repeated once; a second failure to meet the required C grade will necessitate review and consultation with the student's adviser and the department head.

51:010. Introduction to Pathology of Speech-Language and Hearing — 3 hrs.

Corequisite: 51:150 (Section 1).

51:101(g). The Communicatively Handicapped Student in the Classroom — 3 hrs.

The role of the classroom teacher in dealing with speech and hearing problems. Information on identification, causes, personality problems, referrals, and remediation procedures. Not to be taken by students majoring in Speech Pathology.

51:105. Anatomy and Physiology of Speech Mechanism — 3 hrs.

Introduction to functional anatomy, physiology, and neurology of speech mechanism. Prerequisites: 88:008; 51:111.

51:106(g). Language Acquisition in Children — 3 hrs.

Study of the acquisition of phonological, semantic, syntactic and pragmatic systems as these interface with brain maturation and motor, cognitive and social development. Biological and social/interactional factors examined from variety of perspectives, stressing "applied" orientation. Prerequisite: 51:010 or consent of instructor.

51:111. Phonetics in Speech Pathology — 4 hrs.

Study of International Phonetic Alphabet with emphasis on symbols for clinical transcription. Introduction to physiological and acoustic aspects of speech sound production.

51:125(g). Disorders of Articulation — 3 hrs.

Normal and disordered phonological/articulatory systems; exploration of assessment and intervention principles and practices. Prerequisite: 51:111.

51:127(g). Disorders of Language — 3 hrs.

Assessment and intervention principles and techniques for preschool and school-aged, language-disordered children. Examination of medical psychological and linguistic orientations. Prerequisite: 51:106 or consent of instructor.

51:130(g). Cleft Palate — 2 hrs.

Etiology, nature, habilitation and associated problems resulting from facial clefts and other structural facial deviations. Evaluative and therapeutic principles and practices. Includes laboratory. Prerequisites: 51:105; 51:125; or consent of instructor.

51:135(g). Introduction to Disorders of Voice and Fluency — 4 hrs.

Normal and abnormal voice and rhythm production. Etiology, diagnosis and management of voice and fluency disorders. To precede student teaching; open only to speech/language pathology majors. Prerequisites: 51:105; 88:008; or instructor's consent.

51:150. Clinical Processes I, II, III — 1 hr.

Introduction to role of speech/language pathologist as clinician; emphasis on analysis and observation of remediation, culminating in a semester of participation as an aide in the Speech Clinic. Course divided into sequential, one-semester sections of 1 hours credit for each section (must be taken in sequence): Sec. I, Analysis; Sec. II, Observation; Sec. III, Participation. For Section I, corequisite: 51:010 or consent of instructor.

51:155. Clinical Practice — 1-2 hrs.

Clinical experience in evaluation and remediation of language, articulation, and voice disorders as well as experience in the testing of hearing. Prerequisite: 51:125 or consent of instructor. Must be repeated for a total of 4 hours of credit. Must be taken as credit-no/credit.

51:156(g). Clinical Examination — 3 hrs.

Theoretical and practical aspects of the evaluation process. Prerequisites: 51:111; pass university Writing Competency Examination or consent of instructor.

51:157(g). Introduction to Evaluation and Diagnosis — 1 hr.

Introductory clinical experience in interviewing techniques; application of formal and informal evaluation instruments and techniques; formulation of diagnoses and prognoses; report writing, includes lab. experience. Prerequisites: 51:155; 51:156; or consent of instructor.

51:165(g). Introduction to Audiology — 3 hrs.

Basic hearing science, types of hearing loss, and audiometric measurement. Prerequisite: 51:105.

51:170(g). Manual Communication — 3 hrs.

Basic principles and instruction in the use of manual communication; survey of various manually coded English systems and American Sign Language.

51:180(g). Current Problems in Speech Pathology and Audiology — 1-2 hrs.

Major issues confronting clinicians, researchers, and training institutions. Seminar discussion topics to be determined by participants. Prerequisite: approval of instructor.

51:181(g). Speech and Language Problems of Special Populations — 2 hrs.

Examination of speech and language problems of special populations defined by clinical categories and found in public schools. Includes patterns of language and communication, learning styles, assessment accommodations, and intervention strategies. Prerequisite: 51:155 or consent of instructor.

51:195(g). Organization and Management of Clinical Programs — 2 hrs.

The planning and implementation of speech-language pathology and audiology programs in various clinical settings. Prerequisite: 51:125 or instructor's approval.

51:196(g). Research Methods in Speech Pathology and Audiology — 3 hrs.

Introduction to methodology, various designs, and report preparation for research. Requires participation in research project. Prerequisite: 25:180.

51:230. Language Training Strategies — 3 hrs.

Review of current literature materials for language-disordered children. Requires active participation for demonstrations and presentations of articles and materials. Prerequisites: 51:106; 51:127; consent of instructor.

51:240. Aphasia — 3 hrs.

Diagnosis and remediation of aphasia in adults.

51:241. Motor Speech Disorders — 3 hrs.

Neurophysiological bases, differential diagnosis, and clinical management of motor speech disorders in children and adults. Prerequisite: 51:240 or consent of instructor.

51:246. Fluency Disorders — 2 hrs.

Etiology, nature, diagnosis, and management for disorders of fluency in speech production. Prerequisite: 51:106 or consent of instructor.

51:249. Speech Science — 3 hrs.

Speech acoustics: lecture and laboratory assignments on the structure of speech waves, theories of speech production, speech intelligibility, speech perception, psychoacoustics, and speech synthesis. Prerequisites: 51:105; 51:111; 88:008 and consent of instructor.

51:255. Advanced Clinical Practice — 1-4 hrs.

Clinical experience in diagnosis and remediation of the speech problems associated with aphasia, cerebral palsy, hearing loss, and disorders of voice. Prerequisite: 51:155. May be repeated for a total of 4 hours of credit.

51:258. Audiology Practicum — 1-2 hrs.

Supervised clinical experience in auditory evaluation and training of the hearing impaired. May be repeated for a total of 6 hours credit. Prerequisite: Audiology major, or consent of instructor.

51:265. Pure-tone and Speech Audiometry — 3 hrs.

Fundamental principles and clinical applications of pure-tone and speech audiometry. Prerequisite: 51:165.

51:270. Anatomy and Physiology of the Auditory Mechanism — 3 hrs.

Functional anatomy, physiology, neurology of the hearing mechanisms. Prerequisite: 51:165 or consent of instructor.

51:271. Advanced Auditory Tests — 3 hrs.

Application of pure-tone and speech audiometry to complex auditory problems and differential diagnostic questions. Prerequisite: 51:265.

51:272. Hearing Aids — 3 hrs.

Physical characteristics and clinical aspects of auditory amplifiers for the hearing impaired. Prerequisite: 51:265.

51:273. Pediatric Audiology — 2 hrs.

Development of auditory perception, auditory deprivation, tests and techniques with the neonate, infant, and child. Prerequisite: 51:265.

51:274. Community and Industrial Hearing Conservation — 2 hrs.

Study of the audiologist's role in managing hearing conservation programs in the community, industry, and public school. Prerequisite: 51:265.

51:275. Habilitative/Rehabilitative Audiology — 3 hrs.

Principles and procedures for assessment and rehabilitation of communication deficits of hearing-impaired persons — emphasizing amplification systems, auditory training, speechreading, and total communication for the hard-of-hearing and deaf.

51:285. Individual Readings — 1-2 hrs.

Project must be approved before beginning of semester in which work is to be done. May be repeated. Prerequisite: approval of instructor and head of department.

51:289. Seminar in Audiology — 2 hrs.

Seminars in special topics to be announced in the Schedule of Classes. Prerequisite for each scheduled topic will be instructor's approval. May be taken for a maximum of 6 hours as long as no topic is repeated.

51:289. Seminar in Articulation Disorders — 2 hrs.

Phonological/articulatory disorders; includes issues in the assessment, management, and factors related to such disorders. Prerequisite: 51:125 or consent of instructor.

51:289. Seminar in Speech Pathology — 2 hrs.

Seminars in special topics to be announced in the Schedule of Classes. Prerequisite for each scheduled topic will be completion of major requirements for that area. May be taken for a maximum of 6 hours as long as no topic is repeated.

51:290. Advanced Diagnostics — 2 hrs.

Advanced techniques in diagnostics, incorporating a multi-disciplinary approach. Opportunities provided to observe and administer appropriate evaluative materials. Prerequisite: Student must be in terminal semester of graduate program.

51:291. Advanced Disorders of Voice — 2 hrs.

Anatomy and physiology of the laryngeal mechanism; etiology and management of voice disorders, including those of the laryngectomee. Prerequisite: 51:135 or consent of instructor.

51:296. Clinical Supervision in Speech Pathology — 2 hrs.

Approaches to clinical supervision; objectives and methods; practicum to be arranged concurrently. Prerequisite: consent of instructor. Enrollment will be limited to six students selected by instructor from those graduate students in their last semester's work in the department.

51:299. Research. — 1-6 hrs.

Curriculum and Instruction

*May, Head. Aldridge, Cannella, Dishner, Eland, Eller, Euchner, Hardman, Harms, Hatcher, Heller, Hosier, King, Kueter, Kuse, Larsen, Marchesani, D. Moore, S. Moore, Ratekin, M. Shaw, *Stefanich, W. Stewart, Wedman.*

**on leave*

Early Childhood Education Major

This major leads to certification for teaching in nursery school and kindergarten. The student will complete the General Education requirements, the Common Professional Sequence, the specified major requirements, a Professional Semester, plus electives to complete a minimum of 130 hours. The prescribed program is as follows:

Major requirements: 20:109; 23:044; 21:149; 21:154;

42:045 12 hours

Professional Semester: 21:105; 21:192; 23:110 17 hours

To be taken simultaneously during the semester immediately preceding Student Teaching. A 2.40 grade index in all course work at the University of Northern Iowa and, also, a 2.40 g.p.a. on all course work at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction, is required to enter the Professional Semester.

Within the student's total program (including General Education) at least one course in each of these fields should be included: art, mathematics, music, science, sociology or anthropology, speech or speech pathology. A student must take a course in Human Relations approved by the State Department of Public Instruction (DPI) and a course in American history or American government for certification.

The student should also include a concentration of at least 15 semester hours in one of the following areas: art and industrial arts, English and speech, health and physical education, mathematics, a modern foreign language, music, science, or social science.

A student who wishes to be certified for elementary grades above kindergarten should include the following work in addition to the required work listed above:

A course in geography, one in English, an elective in reading, and 80:030, 80:131, 80:134, and 4 hours of 28:134 or 28:136.

An emphasis in Special Education (Pre-School Handicapped) under this major is offered by the Department of Special Education. See page 139 for details of the program.

Elementary Education Major

The student will complete the General Education requirements, the Common Professional Sequence, a Professional Semester, the major requirements, the Emphasis or Area of Concentration requirements, as indicated, and electives to complete a minimum of 130 hours. The prescribed program is as follows:

Major requirements: 20:100; 22:050 or 22:150; 23:044;

24:031 or 24:131; 42:045; 80:030; 80:31; 2- or

3-hour elective in reading and language arts 15-16 hours

Professional Semester: 21:101; 23:110; 80:134 17 hours

Courses to be taken simultaneously during the semester immediately preceding student teaching by all elementary education majors except those with an emphasis in Reading or Special Education. A 2.40 grade index on all work at the

University of Northern Iowa and, also, a 2.40 g.p.a. on all course work at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction, is required to enter the Professional Semester.

Note: Students who wish to specialize in upper or lower-level elementary teaching may do so by selecting appropriate sections of courses designated upper (U) and lower (L) and by student teaching at the level of specialization.

Courses in Specific Field:

The total program (including General Education) should be planned by the student to include some course work in each of these fields: art, English, geography, mathematics, music, science, and speech or speech pathology.

Additional Requirements for Certification:

Those persons seeking certification to teach in Iowa must take a course in American history or American government. In addition, a Department of Public Instruction (DPI) approved program in human relations must be completed.

Area of Concentration:

Students will include a concentration of at least 15 semester hours in one of the following areas: art and industrial arts, English and speech, health and physical education, mathematics, a modern foreign language, music, science, or social science.

Emphases:

The student may also choose one of the following emphases in lieu of an area of concentration, indicating the desired area of teaching and taking work appropriate to this emphasis.

1. **Reading and Language Arts:** A basic core of methods courses in reading and language arts is required as well as supporting areas. This emphasis and requirements for the elementary education major can be completed concurrently.

Required: 23:111; 23:112; 23:113; 23:140;
23:193; 50:130; 63:130 22 hours

2. **Remedial Reading:** This emphasis satisfies the state requirements for certificate approval as a reading teacher. This emphasis and requirements for the elementary education major can be completed concurrently.

Required: 23:140; 23:147; 23:192; 23:193; 50:130;
63:130 or another course in linguistics;
reading elective 19-22 hours

3. **Special Education and Pre-School Handicapped:** These emphases are under the jurisdiction and supervision of the Department of Special Education and requirements are given on page

Middle School/Junior High School Education Major

The Middle School/Junior High School major leads to elementary certification (K-8) with approvals to teach in selected subject fields through grade 9. The major is designed to prepare students to teach at the middle level (grades 4-9). The student will complete the General Education requirements, the common professional sequence, the major requirements, a Professional Semester, a subject field area of 23 to 30 hours, and electives to complete a minimum of 130 hours. The student must include a course in Human Relations approved by

the State Department of Public Instruction (DPI) and a course in American history or American government for certification.

Students are encouraged to plan their programs carefully and to complete requirements in two subject field areas if possible.

Required: 20:116; 23:044; 22:050 or 22:150; 23:132;
24:031 or 24:131; 80:030, 80:131 or 80:112 16 hours
Professional Semester: 21:170; 23:110; 80:134 17 hours

A 2.40 grade index in all course work at the University of Northern Iowa and, also, a 2.40 g.p.a. on all course work at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction, is required to enter the Professional Semester.

Subject Field: At least one area chosen from the following (see below for requirements for each program) — (Also see departmental statements):

Coaching Endorsement
General Science
History
Home Economics
Industrial Arts
Language Arts
Mathematics
Modern Languages (French, German, Spanish)
Reading: Approval 91
Special Education: Approvals 80 and 81 (K-9)

General, Electives, or Additional Subject Field —

The student may complete a secondary minor in an area other than the chosen subject field, and may also utilize electives to strengthen academic preparation in one field or strengthen the preparation in general education, or psychology.

Subject Field Requirements

Coaching Endorsement —

The coaching endorsement is for K-12. However, it does not qualify the student for certification to teach physical education at any level. (May only be taken as a supporting concentration area.)

Required: 42:122; 42:124; 42:125; 42:127; 41:175 ... 10 hours
Electives: 4 hours from 42:101; 42:102; 42:103;
42:104*; 42:105; 42:106; 42:107; 42:108; 42:109;
42:110; 42:111; 42:112; 42:113 hours
*Selection of 42:104 requires addition of 42:016
(Football) 0-1 hours
14-15 hours

General Science —

Required: 82:130 or 21:141 3 hours
Required: 82:194 2 hours
Required: a 3- or 4-hour course in each of the
following areas: physics, chemistry, biology,
earth science 12-16 hours
Electives in science (to make a total of 26 hours) ... 5-9 hours
26 hours

History —**Required:**

- 96:014 United States History to 1877 — 3 hrs.
 96:015 United States History since 1877 — 3 hrs.
 96:054 Modern Europe to 1815 — 3 hrs.
 96:055 Modern Europe since 1815 — 3 hrs.
 90:190 The Teaching of the Social Studies — 3 hrs.
 Electives: 6 hours in history (3 hrs. American, 3 hrs. world)
 — 6 hrs.

6 hours in social studies (94:014 highly recommended) — 6 hrs.

Total 27 hours

Home Economics —**Required:** 31:010; 31:015; 31:035; 31:037;

31:051; 31:060; 31:065; 31:070; 31:152; 31:190 ... 25 hours

Industrial Arts —**Required:** 33:005; 33:011; 33:020; 33:022;

33:032; 33:036; 33:190 25 hours

Required: two of the following: 33:016;

33:018; 33:183 4 hours
 29 hours

Language Arts —**Required:** 62:003 or 62:103 or 62:104; 62:034;

62:042 or 62:043; 62:052 or 62:053; 62:165;
 62:190; 63:130 20 hours

Electives in English 3 hours
 23 hours

Mathematics —**Required:** 80:030; 80:048 or 80:060; 80:111; 80:112;

80:113 or 80:144; 80:072 or 80:153; 80:134;
 80:191; 81:070 28 hours

Modern Languages —**French:** 72:051 and 72:061; 72:072; 72:101; 72:103*

or 72:124; or 72:125; 70:190; plus electives 24 hours

German: 74:011; 74:052 and 74:062; 74:101; 74:123;

74:103 or 74:107; 70:190; plus electives 24 hours

Spanish: 78:051 and 78:061; 78:052 and 78:062;

78:101; 70:190; 78:103; 78:123 or 78:140; plus
 electives and a 2-hour course in methods or a
 bilingual pre-practicum or a bilingual practicum . 24 hours

(*If 72:103 is elected, the student is strongly advised to take one of the two courses in French Civilization.)

Reading: Approval 91 (new subject field)**Required:**

23:110 Reading and Language Arts — 5 hrs.

23:140 Diagnostic Teaching of Reading
 and Language Arts — 3 hrs.

23:147 Remedial Reading — 3 hrs.

23:192 Experience in Reading: Tutoring — 2-4 hrs.

23:193 Experience in Reading: Field — 2-4 hrs.

63:130 The Structure of English — 3 hrs.

23:132 Reading in Content Areas — 2 hrs.

50:130 Creative Dramatics for Children — 3 hrs.

Electives in Reading (23:xxx) 2-3 hours
 25-30 hours

Special Education: Approvals 80 and 81 (K-9) (new subject field)**Required:**

22:170 Educational Management of the Handicapped I — 2 hrs.

22:171 Educational Management of the Handicapped II — 3 hrs.

22:174 Teaching of the Handicapped — 2 hrs.

22:185 Readings in Special Education — 1-2 hrs.

22:192 Experience in Special Education — 4 hrs.

22:180 Teaching of the Handicapped: Primary — 3 hrs.

22:182 Teaching of the Handicapped: Intermediate — 3 hrs.

28:135 Special Education Teaching — 4 hrs.

Total 22-23 hours

Educational Media Minor

Required: 24:031 3 hours

24:131 3 hours

Electives: 10 hours in Educational Media courses 10 hours
 16 hours

**Early Childhood, Elementary,
Middle/Junior High School Education****21:101. Elementary Methods and Materials — 10 hrs.**

This fused course deals with the methods and materials used in the elementary school in relation to the development of the child. It embodies the content of such courses as the teaching of elementary social studies, science, art and music. Prerequisites: 20:018; 20:040; 25:050.

21:105. Learning Experiences of Young Children — 10 hrs.

Experiences, methods and materials for teaching young children. Prerequisites: 20:018; 20:040; 25:050.

**21:141(g). Correlated Activities and Materials in Elementary School
Science and Mathematics — 3 hrs.**

Activity based on pedagogical investigation of manipulative materials and activities used in elementary science and mathematics followed by critical analysis using task analysis and research investigations. Prerequisite: 80:134 and 21:101 or equivalents.

21:142(g). Methods in Elementary Science — 2 hrs.

Investigation and implementation of commercial and teacher-constructed materials and appropriate instructional strategies for contemporary elementary school science programs. Prerequisite: junior standing or consent of instructor.

21:143(g). Social Studies in the Elementary School — 2 hrs.

Methods and materials for teaching the knowledge, attitudes, and skills in social studies. Prerequisite: junior standing or consent of instructor.

21:145(g). Storytelling — 2 hrs.

Art and techniques of storytelling to enrich the elementary classroom learning experiences. 21:044; 21:144 or 35:132 should accompany or precede this course.

21:149(g). Parent and Community Relations — 2 hrs.

Procedures for developing home-community-school relationships to promote the education of each child in reaching his or her maximum potential. Emphasis on preschool-kindergarten level.

21:151(g). Early Childhood Curriculum — 3 hrs.

Current trends in curriculum for preschool children. No credit for student with credit in 21:105. Prerequisite: junior standing or consent of instructor.

21:152(g). Elementary Curriculum — 3 hrs.

Recent trends in the curriculum for children in grades K-6. No credit allowed for a student who has received credit in 21:101. Prerequisite: junior standing or consent of instructor.

21:154. Nursery School and Kindergarten — 2 hrs.

Background for establishing and administering a pre-school facility; investigates equipment, supplies, staffing, financing, policy statements, and curriculum planning for day care, nursery school, and kindergarten.

21:155(g). Utilizing Support Services for Young Children — 2 hrs.

Survey of resource agencies and organizations available to children and families. Development of skills in assessing needs, acquiring funding, making referrals and recommendations, and reporting progress. Prerequisite: 21:154 or equivalent.

21:170. Methods and Materials for the Middle School/Junior High School — 10 hrs.

Teaching strategies, materials, and school organization for grades 4 through 9 in both the traditional junior high and middle school settings; methods of teaching both the preadolescent and the adolescent. Prerequisite: 20:018; 20:040; 20:050.

21:192(g). Experience — 2-4 hrs.

Offered in various specialized fields as listed in the Schedule of Classes, but may be taken only twice for credit in the same area.

21:201. Issues and Trends in Elementary Curriculum — 3 hrs.

Current ideas influencing the planning and implementation of curriculum in elementary schools. Prerequisite: 21:101 or department approval.

21:212. Recent Research in Elementary School Science — 3 hrs.

Major philosophical developments as related to changing mode of science instruction. Research on adaptation, management and control in areas of social-psychological factors and logistical factors. Prerequisite: 21:101 or 21:142 or departmental approval.

21:213. Recent Research in Elementary School Social Studies — 3 hrs.

Various research investigations of examining the content and processes of contemporary curricula. Prerequisite: 21:101 or 21:143 or department approval.

21:214. Recent Research in Early Childhood Education — 3 hrs.

Review of implications of research to gain techniques for improving instruction and programs for young children. Prerequisites: 21:105 or equivalent.

21:220. Administration and Supervision of Programs for Young Children — 3 hrs.

Preparation to plan, organize, and operate public and private programs for young children, including working with families and with other social agencies, obtaining and administering funds, staffing, providing for health and safety, and curriculum decisions. Prerequisite: 21:154 or equivalent.

21:221. Analysis and Design of Curriculum for Young Children — 3 hrs.

Basic assumptions underlying curriculum for young children to prepare students to improve teaching practices; and provide direction to future decision making on programs and materials. Prerequisite: 21:105 or 21:151 or equivalent.

21:222. Evaluating the Early Childhood Curriculum — 3 hrs.

Preparation for conducting and interpreting ongoing curriculum evaluations and meet evaluation guidelines for funding purposes. Emphasis on evaluation for effective decision making and curriculum problem solving at local level. Prerequisite: 21:221 or equivalent.

21:242. Analysis and Improvement of Science Instruction in the Elementary School — 3 hrs.

Application of developmental psychology to the scope and depth of science instruction; analysis of strengths and weaknesses of alternative science programs including initial and subsequent costs, facility requirements, and implementation difficulties. Prerequisite: 21:101 or 21:142 or department approval.

21:243. Analysis and Improvement of Social Studies Instruction in the Elementary School — 3 hrs.

Aids teacher in exploring historical and current practices in social studies to create new approaches by using available resources and ideas. Prerequisite: 21:101 or 21:143 or department approval.

21:254. The Gifted Child — 3 hrs.

Educational needs of the gifted and talented child. Emphasis on characteristics, identification, underachievement, counseling, and motivation. Attention to curriculum and organization adaptations. Prerequisites: 25:294; 20:241 or 26:234; plus two years teaching experience and consent of department head.

21:255. Educational Strategies for the Gifted — 3 hrs.

Trends in educational programming for gifted learners. Prescription implementation and evaluation of appropriate educational intervention strategies. Prerequisite: 21:254 or equivalent.

21:270. Developments in Middle School/Junior High School Curriculum — 3 hrs.

Characteristics of middle school pupils including social needs, interests, physical and psychological characteristics as these relate to organization, curriculum and instructional strategies in middle schools and junior high schools. Prerequisite: 21:170 or consent of instructor.

21:285. Readings in Education — 1-3 hrs.

21:289. Seminar in Education — 2 hrs.

Special topics listed in Schedule of Classes.

21:297. Practicum in Elementary Education — 2 hrs.

21:299. Research — 3 hrs.

21:352. Curriculum Theory and Development — 3 hrs.

Aids the advanced graduate student in viewing, analyzing, and interpreting the curriculum and instruction program of an educational institution and in developing skills for implementing change. Prerequisite: graduate level curriculum course or approval of department.

Reading and Language Arts

23:044. Children's Literature — 3 hrs.

Literature materials for the elementary grades; emphasis on goals, scope, and methods. To develop ability to evaluate library materials.

23:110. Reading and Language Arts — 5 hrs.

Introductory course in the teaching of reading and other communication skills. Survey of recent literature and research in the field.

23:111(g). Language Development in the Elementary School — 3 hrs.

Development of children's oral and written language as communication tools with implications for the school curriculum; emphasis on interactions among language, thinking, and social development. Includes direct experience with children. Prerequisite: 23:110.

23:112(g). Issues and Trends in Elementary Reading — 3 hrs.

Recent methodological developments, new materials, and innovations in organization of elementary reading curriculum. Prerequisite: 23:110.

23:113(g). Teaching Expressive Language Arts — 3 hrs.

Creative aspects of oral and written language in the elementary school; explores methods of fostering creative oral and written expression. Includes survey of recent literature and research in the field. Experience with individual children and small groups.

23:114(g). Materials and Techniques for Reading — 2 hrs.

Analysis and evaluation of reading materials, including technological innovation. Adaptation and creative utilization of materials to meet specific needs of children. Prerequisite: 23:110 or 23:130.

23:130(g). Teaching Reading to Adolescents — 3 hrs.

Introduction to the reading process, materials and methods of instruction, evaluation of reading achievement, and study of reading demands in the secondary curriculum. Recognition of characteristics of current secondary reading programs.

23:132(g). Reading in Content Areas — 2 hrs.

Evaluation of reading demands in school subjects. Suggestions for content area teachers and developmental reading teachers at secondary and upper elementary levels.

23:134(g). Foundations for Reading Instruction — 3 hrs.

Current theories of the reading process, components of K-12 reading programs and the roles of personnel in relation to reading programs. Prerequisite: junior standing or consent of instructor.

23:140(g). Diagnostic Teaching of Reading and Language Arts — 3 hrs.

Instructional needs of individual children within the classroom. Includes group and individual evaluation; selecting materials, methods and activities for special problems; recognizing and referring students with specific learning disabilities. Prerequisite: 23:110 or 23:130.

23:144(g). Literature for Elementary Children — 3 hrs.

An advanced course in children's literature. Prerequisite: 21:044 or equivalent beginning course in children's literature.

23:147(g). Remedial Reading — 3 hrs.

Introductory course in remedial reading in public schools; theory, methods, and materials currently used. Prerequisite: a methods course in reading. Corequisite: 23:192.

23:192(g). Experience in Reading: Tutoring — 2-4 hrs.

Supervised tutoring in the University Reading Center or in a public school Reading Center. Prerequisite: instructor's approval.

23:193(g). Experience in Reading: Field — 2-4 hrs.

Supervised experience teaching in a remedial elementary developmental or secondary school reading program. Prerequisite: 23:147 or consent of instructor.

23:210. Recent Research in Reading — 3 hrs.

Research in reading with its implications for the classroom teacher and supervisor. Prerequisite: one course in the teaching of reading.

23:212. Psychology of Reading — 3 hrs.

An investigation of behaviors significantly related to the reading process, including visual and auditory perception, cognition, language, maturational, physiological and neurological factors and personality.

23:238. Diagnosis of Readig Problems — 3 hrs.

Experience in administering and interpreting diagnostic reading tests. Survey of correlate and causal areas including introduction to tests frequently used by specialists. Prerequisite: 23:147.

23:240. Language, Learning, and Reading Disability — 3 hrs.

Exploration of factors in reading disability, causes of severe disability, development of remedial programs, and the roles of specialists and parents in remediation. Prerequisite: 23:147; 23:238.

23:242. Case Studies in Reading Disability — 3 hrs.

The case study method designed to assist the student to develop the skills and techniques in writing case studies and to provide experience in utilizing case studies in planning and evaluating individualized remedial programs.

23:244. Research Design in Reading — 2 hrs.

The evaluation of research designs in readings and construction of a research design for a selected problem.

23:289. Seminar — 2 hrs.

23:290. Practicum — 2-4 hrs.

23:299. Research.

Educational Media

24:031. Audio-Visual Communications — 3 hrs.

Role of educational media in the teaching-learning process. Selection, preparation, utilization and evaluation of instructional materials for specific communications. Discussion, 3 periods; lab., as arranged.

24:032. Audio-Visual Equipment Maintenance — 1 hr.

Basic mechanical and electronic maintenance of traditional audio-visual equipment. Lecture, 1 hr.; lab., 1 hr. Prerequisite: consent of instructor.

24:101(g). The Media Field — 1 hr.

An introduction to the field of educational and communications media and technology with applications of theory to practice. Prerequisite: junior standing or consent of instructor.

24:105(g). Audio Systems — 1 hr.

Audio systems essential for motion picture, slide, and television production. Prerequisite: junior standing or consent of instructor.

24:130(g). Slide Production — 2 hrs.

Fundamentals of color slide photography and the planning, design, presentation of slide programs. Prerequisite: 24:105.

24:131(g). Resources for Communications — 3 hrs.

Selection, utilization, and implementation of multisensory materials in the preparation and design of messages.

24:138(g). Graphics Production — 3 hrs.

Assessment of the generation, manipulation, integration, and final formats of type, artwork, and photography applied to printed and projected materials; creative applications of current technology in the development of visuals. Prerequisite: 24:031 or 24:131.

24:145(g). Film History — 3 hrs.

Historical growth of the motion picture medium, and the evolution of its role as a media of mass communication.

24:147(g). Photography — 3 hrs.

Basic principles, skills, and techniques of still photography and their application to communication. Lab. included.

24:148(g). Advanced Photographic Techniques — 2 hrs.

Monochromatic photography including view camera techniques, composition, sensitometry, selection of photographic chemistry and emulsions, filters, specialized printing and finishing techniques. Prerequisite: 24:147 or consent of instructor.

24:150(g). Instructional Television Production — 3 hrs.

Techniques of instructional television production as applied in the classroom and the studio. Practical experience in planning and producing instructional television programs.

24:151(g). Fundamentals of Motion Picture Production — 3 hrs.

Production and planning, visual continuity, shooting, animation, editing, sound recording, titling, and other technical problems of production as applied to individual student films.

24:152(g). Advanced Motion Picture Production — 3 hrs.

Techniques of 16 mm. instructional sound motion pictures applied to group projects; technical problems of production. Prerequisite: 24:151.

24:155(g). Audio Production — 2 hrs.

Fundamentals of audio production including production planning, budgeting, selecting equipment, recording, editing, mixing, dubbing, duplicating and other technical problems of production.

24:156(g). Multi-Image Production — 2 hrs.

An advanced course in planning, production, and presentation of multi-image programs. Prerequisites: 24:105 and 24:130 or written approval of the instructor.

24:157(g). Advanced Instructional Television Production — 3 hrs.

Examination of techniques and theoretical aspects of professional television production applied to a group project. Prerequisite: 24:150 or written approval of instructor.

24:160. Media Projects — 1-4 hrs.

Specialized study in independent media projects. Credit to be determined at time of registration; project, credit, and evaluation criteria require advance approval of instructor.

Sec. 1. Television. Prerequisite: 24:150.

Sec. 2. Graphics. Prerequisite: 24:031 or 24:131.

Sec. 3. Film. Prerequisite: 24:151; 24:152.

Sec. 4. Photography.

Sec. 5. Multi-Media Communications. Prerequisites: 24:031 or 24:131. May be repeated for credit to a maximum of 4 hours for any section.

24:186. Studies in Media — 1-4 hrs.

24:189. Readings in Media — 1-3 hrs.

24:205. Instructional Computing Design — 3 hrs.

Evaluation, selection and utilization of programmed materials and machines; research and construction of programmed materials. Useful for educational media directors and administrators.

24:230. Communication Theory in Media — 3 hrs.

Contemporary theory of human and mass communication, learning, perception, and propaganda as they apply to message design utilizing communication media.

24:232. Selection and Integration of Materials — 1-3 hrs.

Individual experiences providing an overview of curricular resource materials.

24:235. Media Administration — 2 hrs.

An advanced course to prepare a media graduate to administer any one or all of the specific areas of media.

24:240. Instructional Development — 3 hrs.

Analysis and synthesis for structuring learning environments including learner, task, environmental, and instructional strategy analysis.

24:260. Advanced Media Projects — 1-4 hrs.

Credit to be determined at time of registration; project, credit, and evaluation of criteria require advance approval of instructor.

Sec. 1. Television. Prerequisite: 24:150.

Sec. 2. Graphics. Prerequisites: 24:031 or 24:131; 24:137.

Sec. 3. Film. Prerequisites: 24:151; 24:152.

Sec. 4. Photography. Prerequisite: 24:137.

Sec. 5. Multi-Media Communications. Prerequisites: 24:031 or 24:131; 24:137.

May be repeated for credit to a maximum of 4 hrs. for any section.

24:285. Readings in Media — 1-3 hrs.

24:286. Studies in Media — 1-4 hrs.

24:289. Seminar — 2 hrs.

24:297. Practicum — 2-3 hrs.

24:299. Research.

Safety Education

Safety Education Major — Teaching

Required: 20:116, 20:138; 24:131; 30:030; 30:131;

30:132; 30:135; 30:137; 30:140; 30:192;

33:105; 41:010; 41:010 (Standard Course); 41:072 ... 33 hours

This major must be accompanied by a second teaching major or a teaching minor.

Safety Education Minor — Teaching

Required: 20:138; 30:030; 30:130; 30:131; 30:135;

30:137 or 30:140; 33:105 ... 22 hours

Highly recommended: 20:116; 30:192.

Approval to teach driver education will be recommended on the basis of completion of 30:030, 30:130, 30:131, and 30:137, plus 2 to 3 hours of electives as recommended by the department.

30:030. Principles of Safety Education — 4 hrs.

Methods and materials of teaching safety education in elementary and secondary schools.

30:130(g). Driver and Traffic Safety I — 3 hrs.

Classroom and practice driving units; safety education as a social problem; development of safety skills, habits, attitudes, and ideals; accident causes; study of research.

30:131(g). Driver and Traffic Safety II — 3 hrs.

Deals with classroom and in-the-car techniques of imparting instruction to high school students taking driver education.

30:132(g). Directing the Safety Program — 2 hrs.

Organization and administration of safety programs through the entire school system.

30:135(g). Teaching Driver Education for the Handicapped — 2 hrs.

Methods and techniques in teaching the handicapped to drive. Prerequisites: 30:130; 30:131.

30:137(g). Teaching Motorcycle and Recreational Vehicle Safety — 3 hrs.

Fundamental knowledge and skill development to assist participants in becoming safe vehicle operators, and equipping them to develop and teach such safety education programs in their respective schools.

30:140(g). Traffic Law Enforcement — 3 hrs.

Designed to acquaint safety and driver education teachers with the purposes of traffic law enforcement and traffic engineering.

30:192(g). Experience in Safety Education — 2-4 hrs.

Offered in various specialized fields; may be repeated once for credit in a different area. Maximum of 8 hours credit (only 2 hours may be applied to major requirement.)

Earth Science

W. Anderson, Head. Brant, DeKock, DeNault, Hoff, Kelsey, Walters.

Earth Science Major — Teaching

Required: 82:190, 82:194; 86:070 or 86:044 and

86:048; 88:054; 88:056 ... 17-20 hours

Required: 87:010; 87:011; 87:021; 87:031; 87:035 ... 14 hours

Electives in earth science: 100-level courses

(excluding 87:189) ... 12 hours

43-46 hours

Earth Science Major

Required: 8 hours from 86:044; 86:048; 88:054;

88:056; 88:130; 88:131 ... 8 hours

Required: 3 to 5 hours from the following: 80:040;

80:046; 80:048; 80:060; 80:072; 81:070 ... 3-5 hours

Required: 87:010; 87:011; 87:021; 87:031; 87:035 ... 14 hours

Required: 100-level courses in earth science ... 12 hours

Required from one of three categories (a, b, c) ... 6 hours

a. electives in earth science;

b. approved courses from the following disciplines*: biology, chemistry, geography, physics, and science;

c. electives in earth science and approved courses from category "b" above.

43-45 hours

*Electives from outside earth science must be approved by the head of the Department of Earth Science.

Geology Major

Required: 80:046 or 80:060; 86:048 or 86:070; 88:056

or 88:131 ... 12 hours

Required: 87:031; 87:035; 87:129; 87:132; 87:136;

87:142 ... 23 hours

Required Summer Field Course* ... 5 hours

Electives in geology (100-level only) ... 6 hours

46 hours

*Summer field course requirements to be met by credit earned at a field camp approved by the department.

Recommended general electives: 80:060; 80:061.

Earth Science Minor — Teaching

Required: 87:010; 87:011; 87:021; 87:031; 87:035; and

at least 2 hours of electives in earth science ... 16 hours

Also required: a teaching major or minor in biology, chemistry, physics, or science.

Earth Science Minor

Required: courses in earth science ... 20 hours

Astronomy Minor

Required: 87:010; 87:011; 87:110; 87:150; 87:154;

80:060; 80:061; 88:130; 88:131; 88:060*;

88:061** ... 28-30 hours

*Not required if student has taken 88:054.

**Not required if student has taken 88:056.

87:010. Astronomy — 3 hrs.

Basic introduction to the universe; development of astronomy and its impact on the minds of men. The solar system and its motions; introduction to stars, galaxies, cosmology, and life in the universe.

87:011. Astronomy Laboratory — 1 hr.

Students enrolling 87:010 may enroll in this laboratory. Involves fundamentals of observation, use of introductory equipment, use of almanacs, atlases, and ephemerides. Some photography will be done. Prerequisite: consent of instructor and concurrent enrollment in 87:010.

87:021. Elements of Weather — 3 hrs.

Meteorological elements and their applications to the environment; interpretation of weather maps and weather data; forecasting and briefing on the daily weather. Discussion, 3 periods.

87:031. Physical Geology — 3 hrs.

Introduction to man's physical environment emphasizing the materials of the earth and the processes that lead to changes within and on the earth. Lab. emphasis: rocks and minerals, landscape development, mountain building. Discussion, 2 periods; lab., 2 periods.

87:033. Geology Field Trip — 1-4 hrs.

Geology and earth sciences field trip; to be preceded by seminars on the geology of the proposed study area. Prerequisites or corequisite: 87:031 or equivalent, and consent of instructor. May be repeated for credit in a different geological area. Only 4 hours may be applied to the Earth Science minor.

87:035. Earth History — 4 hrs.

Methods and principles involved in working out the geologic history of the earth; development of plate tectonics and continental drift through geologic time; pregression and evolution of life from Precambrian time to present time. Prerequisite: 87:031 or equivalent. Discussion, 3 periods; lab., 2 periods.

87:036. Spaceship Earth — 3 hrs.

The geologic environment: its dynamic nature, and interrelationship with man. Examines availability and utilization of energy, mineral, and water resources and the relationship of resource utilization to the natural environment. Attention given to geologic hazards; e.g., earthquakes, volcanoes, landslides, and floods. Discussion, 3 periods.

87:109(g). Fundamentals of Astronomy — 3 hrs.

Basic principles of astronomy; primarily for in-service teachers; no credit for students with credit in 87:010 or equivalent; may not be used toward master's program in earth science. Prerequisites: one year of high school algebra or equivalent, and consent of department head.

87:110(g). Advanced Topics in Astronomy — 4 hrs.

Selected topics in astronomy as chosen by the instructor in consultation with students enrolled. Discussion, 3 periods; lab., 2 periods. Prerequisite: 88:054 or equivalent; 87:010 or equivalent, and 80:046 or equivalent.

87:113(g). Topics in Earth Science — 1-3 hrs.

Offered both on and off campus in flexible format. May include plate tectonics, geomagnetism, naked-eye astronomy, telescope usage, weather forecasting. Topics to be listed in Schedule of Classes. May repeat for credit on a different topic. Application to major requires approval of department head. Prerequisite: junior standing or consent of instructor.

87:125(g). Principles of Paleontology — 4 hrs.

Basic principles of paleontology: special emphasis on invertebrate animals of the geologic past, their morphology, evolutionary trends, classification, and distribution. Field trips for study of fossil occurrences and collection of fossil materials. Prerequisite: 87:035 or 84:024. Discussion, 2 periods; lab., 4 periods.

87:128(g). Fundamentals of Geology — 4 hrs.

Basic principles of physical and historical geology. Prerequisite: departmental approval.

87:129(g). Structural Geology — 4 hrs.

The origins and mechanics of rock deformation. Description and analysis of structural features. Field work where appropriate. Prerequisites: 87:031; 87:035 and junior standing or consent of instructor. Discussion, 2 periods; lab., two 2-hour periods. Offered in alternate years.

87:132. Mineralogy — 4 hrs.

Morphologic, Structural, and x-ray crystallography; crystal chemistry; determinative methods; and systematic descriptions of crystalline solids with emphasis on naturally occurring compounds. Discussion 2 periods; lab 2 three-hour periods. Prerequisites: 86:044 or 86:070.

87:134(g). Geological Field Methods — 3 hrs.

In-field study of geological field procedures and problems including mapping, measurements, aerial photography and aerial photo interpretation, field records, and geological reports. Short field trips. Discussion, 2 periods; lab., 3 periods. Prerequisite: Working knowledge of trigonometry and 87:031 or 97:031 or equivalent. Offered in alternate years.

87:135(g). Optical Mineralogy — 4 hrs.

The optical properties of minerals and the use of the petrographic microscope. Emphasis is placed on the identification of minerals by oil immersion methods and in the identification of minerals in rock thin sections. Prerequisite: 87:132. Discussion, 2 periods; lab., 4 periods. Offered in alternate years.

87:136(g). Stratigraphy and Sedimentation — 4 hrs.

Investigation of layered rocks, sedimentary processes, sedimentation, environments of deposition, correlation procedures, and classification and description of common sedimentary rocks. Field trips. Prerequisite: 87:035; or corequisite: 87:035 and consent of instructor. Discussion, 2 periods; lab., two 2-hour periods.

87:141(g). Geomorphology — 3 hrs.

Mass wasting process and sculptural evolution of varied terrains. Emphasis on Midwestern geomorphology. Short field trips. Discussion, 2 periods; lab., 3 periods. Prerequisite: 87:031 or 97:031 or equivalent.

87:142(g). Igneous and Metamorphic Petrology — 4 hrs.

Description, classification, and genesis of igneous and metamorphic rocks. Discussion, 2 periods; lab., two 2-hour periods. Prerequisite: 87:132. Offered in alternate years.

87:150(g). Astronomy Education — 2 hrs.

Fundamentals of astronomy education; includes review of the night sky; use of planetariums of small and medium size; practice with planetarium projectors; review of resources and resource materials for astronomy teaching; use of media; photography, telescopes and astronomy teaching aids. Discussion 2 periods. Prerequisites: 87:010, 87:011 and junior standing or consent of instructor.

87:154(g). Observational Astronomy — 2 hrs.

Use of astronomical equipment, with laboratory experience in collecting, analyzing, and interpreting data; work with telescopes, cameras, spectrographs, and photometers; utilization of observing aids; charts, catalogs, photographic surveys, and ephemerides. Laboratory 4 periods. Prerequisites: junior standing, 87:011 and instructor's permission.

87:160(g). Geology of Iowa — 2 hrs.

Iowa's geologic history: Precambrian to present. Includes: rock record, changes in environments of deposition, fossil record, occurrence and origin of important economic mineral resources, Pleistocene (Ice Age) history. Prerequisite: 87:035 or graduate status and permission of instructor. Discussion, 2 periods.

87:165(g). Oceanography — 3 hrs.

Basic principles of geological, biological, chemical, and physical oceanography; emphasis on marine geology. Includes: physiographic features of ocean basins, coastal features and processes, oceanic sediments, biological and geological resources, and ocean management. Discussion, 3 periods. Prerequisites: 87:031 or equivalent; junior standing or consent of instructor. Offered in alternate years.

87:180. Undergraduate Research in Earth Science — 1-3 hrs.

Research activities under direct supervision of Earth Science faculty member. Credit to be determined at registration. May be repeated for credit for maximum of 6 hours. Prerequisite: departmental approval.

87:185(g). Seminar — 1-2 hrs.

Topics in astronomy, earth science, geology, or meteorology; emphasis on readings from original sources and current summary works. May be repeated for a maximum of four hours. Prerequisite: departmental approval.

87:189(g). Readings in Earth Science — 1-3 hrs.

Maximum of three hours may be applied to earth science or geology majors or minors. Prerequisite: departmental approval.

87:191. Undergraduate Practicum — 1-2 hrs.

Practical experience in teaching; participation in laboratory and instructional assistance under direct supervision of staff member. Prerequisites: junior or senior standing; consent of instructor and department head. May be repeated for credit to maximum of 4 hours.

87:231. Mineral Deposits — 3 hrs.

The origin of metallic ore deposits with emphasis on the character of the ore-bearing solutions, their mode of transfer and controls of ore deposition; a study of non-metallic deposits with emphasis on the environmental factor controlling their development, examples of the important types of mineral deposits and an introduction to exploration and development methods. Prerequisite: 87:132. Discussion, 3 periods.

87:280. Problems in Earth Science — 1-4 hrs.

Problems and area of study selected according to needs of students. Prerequisite: departmental approval.

87:292. Research Methods in Earth Science — 3 hrs.

Methods and evaluation of research in the earth sciences. Individual exploration of a possible research or thesis project in the earth sciences. Discussion, 3 periods.

87:297. Practicum.

87:299. Research.

Economics

B.W. Anderson, Head. F. Abraham, D. Cummings, Gillette, R. Hansen, Hurst, McCormick, Rives, Strein, Yousefi.

Note: To graduate with a major in economics a student must:

- (1) complete 92:053, 92:054, 92:139, and 92:141 with at least a C — in each course whether taken at UNI or at an institution from which transfer credit for these courses is accepted; and
- (2) earn a 2.5 grade point average in all 92:xxx courses taken at UNI.

Economics Major — Teaching

Required: 90:190; 92:053; 92:054; 92:100; 92:139; 92:141 18 hours

Electives in economics (92:139 and 92:141 recommended to be taken before other advanced courses in economics) 18 hours
36 hours

A minor is required.

It is recommended that students majoring in economics take the following as general university electives: 80:046; 80:060; 80:172; 96:134; 97:120.

Economics Major

Required: 92:053; 92:054; 92:100; 92:139; 92:141 15 hours
Electives in economics (92:139 and 92:141 recommended to be taken before other advanced courses in economics) 21 hours
36 hours

No minor is required.

It is recommended that students majoring in economics take the following courses as general university electives: 80:046; 80:060; 80:172; 96:134; 97:120.

Economics Minor — Teaching

Required: 92:053; 92:054; 92:139; 92:141 12 hours
Electives in economics (92:139 and 92:141 recommended to be taken before other advanced courses in economics) 9 hours
21 hours

It is recommended that students minoring in economics take the following courses as general university electives: 80:046; 80:060; 80:172; 96:134; 97:120.

Note: 92:053 and 92:054 are prerequisites for all 100(g) economics courses.

Economics Minor — Liberal Arts

Required: 92:053; 92:054; 92:139; 92:141 12 hours
Electives in economics (92:139 and 92:141 recommended to be taken before other advanced courses in economics) 6 hours
18 hours

It is recommended that students minoring in economics take the following courses as general university electives: 80:046; 80:060; 80:172; 96:134; 97:120.

Note: 92:053 and 92:054 are prerequisites for all 100(g) economics courses.

92:024. Economics for General Education — 3 hrs.

No credit for student who has credit in 92:053 or 92:054. May not be used for credit on major or minor.

92:053. Principles of Macro-Economics — 3 hrs.

Determining and measuring the level of national product; monetary and fiscal policies to stabilize the economy. Sophomore standing recommended.

92:054. Principles of Micro-Economics — 3 hrs.

Determination of price by demand and supply; distribution of income. Prerequisite: 92:053.

92:100(g). Introduction to Econometrics — 3 hrs.

Econometric techniques and the development of statistical techniques unique to the economics; econometric relationships derived in single and multivariate linear and non-linear regression analysis; use of statistical inference in econometric investigation with applications to the classical works of economic topics. Prerequisite: junior standing or consent of instructor.

92:113(g). Money and Banking — 3 hrs.

Money, commercial banking, the Federal Reserve System and monetary policy.

92:116(g). Labor Economics — 3 hrs.

Labor economics, union-management relationships, and public policy toward employer-employee relationships.

92:117(g). Public Finance — 3 hrs.

Taxation and government expenditures; fiscal policy.

92:120(g). Mathematical Economics — 3 hrs.

Introduction to the application of mathematics to economics with emphasis on the use of graphs, algebra, and simple calculus. Prerequisite: junior standing or consent of instructor.

92:135(g). The Organization of American Industry — 3 hrs.

Structure, conduct and performance of firms, industries and market. Policies to maintain competition.

92:136(g). International Economics — 3 hrs.

Comparative advantage, exchange rates, balance of payments, and trade policies.

92:137(g). Comparative Economic Systems — 3 hrs.

Examination of the capitalistic and socialistic economies through the work of their defenders and critics.

92:138(g). Soviet Economy — 3 hrs.

Soviet economic institutions; operation and performance of the Soviet economic system.

92:139(g). Intermediate Micro-Economic Theory — 3 hrs.

Intermediate level micro-economics. The theory of consumer choice, of the business firm and of resource allocation.

92:141(g). Intermediate Macro-Economic Theory — 3 hrs.

Intermediate level macro-economics. The determinants of aggregate demand, national product and employment; macro-economics objectives and policies.

92:143(g). Economic Development — 3 hrs.

Theories of underdevelopment: approaches and proposals for development; factors influencing development.

92:148(g). Urban and Regional Economics — 3 hrs.

Theory of location and regional development; factors influencing growth and location of production, location of households, city location and urban hierarchies, land use patterns; measures and change in regional economic activity; public policy issues in regional and urban evolution. Research methods including economic base, employment multiplier, location quotient, and threshold analyses. Prerequisite: junior standing or consent of instructor.

92:150(g). Monetary Economics — 3 hrs.

Monetary theory, the supply of money, the demand for money, monetary policy, and current monetary issues. Prerequisites: 92:113 and 92:141.

92:160(g). Managerial Economics — 3 hrs.

An analytical approach to business management; explores business decision making within the structure of micro-economics.

92:170(g). History of Economic Thought — 3 hrs.

Development of economic theory from the early Greeks to the present time.

92:175(g). International Finance — 3 hrs.

International financial theories, institutions, and policies, analysis of the balance of payments, capital flows, disequilibrium and international monetary adjustments.

92:280. Seminar in Economics — 3 hrs.**92:285. Individual Readings — 1-3 hrs.****92:299. Research.****27:203. Leadership in Education — 2 hrs.**

Analysis of roles, and form and manner in which these roles are effectively performed. Prerequisite: 27:201.

27:204. School and Community Relations — 3 hrs.

Factors and conditions within community and schools which affect relationships among the many publics.

27:210. School Personnel Administration — 3 hrs.

Teacher selection and placement, promotion, tenure, and retirement, administration of pupil personnel facilitating services. Prerequisite: 27:201.

27:212. Supervision of the Elementary School — 3 hrs.

Appraisal of instructional processes and development of in-service activities for improvement of instruction.

27:220. Administration of the Elementary School Curriculum — 3 hrs.

For students in school administration and related service areas; emphasis on role of administrator in development of elementary curriculum.

27:221. Administration of the Elementary School — 3 hrs.

Leadership and management roles of elementary school principal. Prerequisite: one year of teaching experience; should have had 27:201.

27:225. Organization, Governance, and Administration of Public Education — 3 hrs.

Analysis of theories of organization and management models; examination of governance, function, and administration of local, intermediate, state, and federal education agencies. Prerequisite: one course in management or administration in education or departmental approval.

27:226. Supervision of the Secondary School — 3 hrs.

Appraisal of instructional processes and development of in-service activities for improved instruction in secondary school.

27:227. Administration of the Secondary School Curriculum — 3 hrs.

For students in school administration and related service areas; emphasis on role of administrator in development of secondary curriculum.

27:228. Administration of the Secondary School — 3 hrs.

Leadership and management roles of secondary school principal. Prerequisite: one year of teaching experience; should have had 27:201.

27:230. School Laws — 3 hrs.

Legal structure for education; powers and duties of boards of education; rights and responsibilities of school personnel; rights of parents and students; and related topics. Emphasis on judicial decisions and common law with practical application for school personnel.

27:240. School Finance — 3 hrs.

Financial support for education; emphasis on Iowa. Prerequisite: 27:201.

27:241. School Buildings and Sites — 2 hrs.

Problems of school building planning, operation, and maintenance. Prerequisite: 27:201.

27:242. Decision Making — 2 hrs.

Environmental and personnel factors influencing decision making; specific emphasis on the process, competencies and consequences. Prerequisite: 27:201.

27:243. School Business Management — 3 hrs.

Business administration and budgeting; emphasis on Iowa. Prerequisite: 27:240.

27:250. Teaching in College — 3 hrs.

Methods and materials of college teaching to help the college instructor become a better teacher. Useful to junior and senior college personnel.

27:252. Current Issues in Higher Education — 3 hrs.

A seminar-type course organized around the major issues confronting vocational-technical schools, community colleges, senior colleges, and universities in contemporary society.

27:254. Collective Negotiations in the Public Sector — 3 hrs.

Current issues in public sector bargaining with emphasis on the Iowa law. Includes a simulated contract negotiation problem.

27:260. History and Philosophy of Higher Education — 3 hrs.

Overview of the historical development, issues, philosophies, and cultural backgrounds of higher education in America.

Educational Administration and Counseling

Krajewski, Head, Albrecht, Frank, D. Hanson, Kimball, Kline, Lembke, McCumsey, A. Smith, Vernon.

School Administration and Higher Education

27:114(g). Administrative Services and the Teacher — 3 hrs.

Understanding of teacher/administrator working relationships and of elementary legal and financial areas of administration crucial to successful teacher performance. Prerequisite: junior standing.

27:141(g). Instructional Leadership — 3 hrs.

Administrative techniques and strategies for improvement of the school program.

27:151(g). Education and Law — 2 hrs.

Introduction to school law; its effect upon education, with recognition of educator's responsibilities to total community. Primarily for non-administrators.

27:198. Independent Study.**27:201. Introduction to Educational Administration — 3 hrs.**

Analysis of societal influences upon educational institutions; the role and function of school administrators.

27:266. Clinical Supervision — 3 hrs.

Principles and process of clinical supervision; emphasis on development of readiness for both clinical supervision concept and implementation of clinical supervision techniques.

27:285. Readings in School Administration.

27:289. Seminar in Education — 2 hrs.

Seminars are offered on special topics as indicated in the schedule of classes.

27:290. Practicum in Education — 2-4 hrs.

27:299. Research.

Student Personnel Services

29:103(g). Introduction to Professional Counseling — 3 hrs.

Counseling in both elementary and secondary schools, and the broad area of "human services" employment in community-based settings. Emphasis on related professional issues and concerns. Prerequisite: junior standing.

29:105(g). Relationship Skills — 3 hrs.

Basic understanding of the intricacies of human relationships, including self-awareness of personal attitudes, behavior patterns and effects upon others; verbal and non-verbal observational skills. Will utilize lecture, demonstration, observation, and practical application. Prerequisite: junior standing.

29:110(g). Information Services in Guidance — 3 hrs.

Orientation of guidance workers to the needs of junior and senior high school students in investigating educational and occupational possibilities; the organization of occupational ideas and materials.

29:112(g). Stress Management — 3 hrs.

The application of counseling processes to the management of stress. Prerequisite: junior standing.

29:114(g). Single Parent Family Issues — 3 hrs.

The single-parent family treated from the perspective of the helping professions; the characteristics, challenges, societal implications, and helping strategies related to this population. Prerequisite: junior standing.

29:116(g). Sex-Role Stereotyping — 3 hrs.

The transmission of sex-role stereotyping and its impact on both boys/men and girls/women. Intervention activities/projects will be examined and developed. Prerequisite: junior standing.

29:121(g). Human Relations Training — 3 hrs.

Introduction to concept of human interaction through "interpersonal recall process." Emphasis on student experiencing desired human interaction skills.

29:124(g). Applied Group Dynamics — 3 hrs.

Principles of group dynamics applied in the instructional setting.

29:125(g). Facilitating Career Development — 2 hrs.

Exploration of foundation of career development theory. Emphasis on significance of occupational preference and choice. Sociological, psychological, and economic determinants of choice examined; and awareness of theoretical concepts of career choice stressed. Prerequisite: junior standing or consent of instructor.

29:198. Independent Study.

29:203. Analysis of the Individual — 3 hrs.

Prerequisite: 25:180 or 25:181 or 29:102.

29:205. Counseling Processes — 3 hrs.

Prerequisite: 29:105.

29:207. Counseling Processes with Children — 3 hrs.

This course will emphasize the specialized counseling and guidance approaches applicable to the elementary school child. The course will place prime emphasis on individual counseling of the elementary school child through the use of play media and verbal techniques. The course involves classroom lectures, assigned readings, classroom discussion and actual counseling experience under supervision. Prerequisite: 29:105 or 29:205.

29:210. Management Systems in Guidance — 2 hrs.

Individual behavior and systems change in the organizational and administrative components in guidance. Prerequisite: one year of teaching experience and departmental approval.

29:220. Group Process — 3 hrs.

Emphasis on direct participation in groups to develop skills in guidance and counseling. Prerequisite: 29:205 or 29:207.

29:226. Consultation Skills — 2 hrs.

Stresses principles, procedures, and process of consultation roles. Consultation content provided through integration of affective education programs and skills into learning process. Prerequisite: 29:205.

29:227. Counseling Theory — 3 hrs.

Theoretical approaches to counseling. Function and present status of counseling theory. A study of each of the predominant theories. Prerequisite: 29:207.

29:230. Student Personnel Programs in Higher Education — 3 hrs.

An introduction to the field of college student personnel services with applications of theory to practice.

29:235. Supervision of Counseling Services — 2 hrs.

Didactic instruction in the methods and techniques of counselor supervision. Approximately one-fourth of the course will be devoted to supervisory experience in the laboratory and in a regular school situation.

29:240. Intervention Strategies — 3 hrs.

Integration of counseling theory and counseling process in the design implementation of strategies for changing designed behaviors. Prerequisites: 29:205; 29:227.

29:252. Relationship and Marriage Counseling — 3 hrs.

Stresses establishing and maintaining effective relations within marriage, with attention to communication and attitudinal barriers. Recognition of alternative styles. Prerequisite: 29:205 or 29:207 or 29:227 or equivalent.

29:285. Readings in Guidance and Counseling.

29:289. Seminar Student Personnel Services — 2 hrs.

Special topics as indicated in the Schedule of Classes.

29:290. Practicum in Student Personnel Services — 3 hrs.

Prerequisite: 29:205 or 29:207.

29:299. Research.

Educational Psychology and Foundations

*Kavich, Head. Baty, T. Berg, L. Brown, Dedrick, Dreier, Dunbar, Erickson, Fortgang, Froyen, Gable, Hash, *Lattin, Lee, Means, Porter, Reppas, Rhum, Rogers, Rozendaal, Rutkowski, D. Schmits, Scott, J. Smith, Strathe, Taylor, Trout, B. Wilson.*

**on leave*

Educational Psychology

20:014. The Teacher and the Child — 5 hrs.

Appraisal of the teaching profession; introduction to the field of teaching; psychology of child growth and development from birth through young adult age level.

20:016. Psychology of Learning — 5 hrs.

Exploration of teaching strategies for learning and significant change in students. Prerequisite: 20:014.

20:017. Field Experience: Exploring Teaching — 1 hr.

Direct and indirect experiences in the ways schools function, roles and responsibilities of teachers, and student behavior. Must be taken on "ungraded" (credit/no credit) basis. Corequisite: 20:030.

20:018. Field Experience: Teacher as Change Agent — 1 hr.

Direct experiences to increase understanding of learning process and apply skills for facilitating the process; may include motivation, classroom management, and teaching strategies. Must be taken on "ungraded" (credit/no credit) basis. Prerequisites: 20:017; 20:030; or equivalents. Corequisite: 20:040.

20:020. Interpersonal Influence Preferences — 2 hrs.

Exploration of values and goals and how these affect relationships; focus on interpersonal skills and helping relations. Highly recommended for all prospective teachers. Must be taken on "ungraded" (credit/no credit) basis.

20:030. Dynamics of Human Development — 3 hrs.

Introduction to behavioral characteristics of individual development; basic developmental principles, age-stage characteristics; and provisions community, family, and school make in the development of children and youth. Corequisite: 20:017. Prerequisites: 40:008 or equivalent; sophomore standing.

20:040. Nature and Conditions of Learning — 3 hrs.

Cognitive, affective and psychomotor learning processes; including behavior modification, concept learning, problem solving, creativity, attitude formation and skill learning. Prerequisites: 20:017 and 20:030 or equivalents. Corequisite: 20:018. Prerequisite or corequisite: 25:050.

20:100(g). Child Psychology — 2 hrs.

Application of developmental concepts, principles and theories to contemporary problems of children age 6 to 12; emphasis on possible causes, children's emotional reactions, and ways of coping with these situations in the classroom. Prerequisite: 20:030 or equivalent.

20:109(g). Development of Young Children — 3 hrs.

The growth and development of the young child with emphasis on research having important implications for the education of young children.

20:116(g). Psychology of Adolescence — 2 hrs.

Psychological concepts applied to adolescent intellectual, physical, and psycho-social behaviors; designed to improve understanding of, and relationships with, adolescents and their search for identity. Prerequisite: 20:030 or equivalent.

20:118(g). Mental Health in the Classroom — 3 hrs.

Basic principles of mental health as they apply to the entirety of the educative enterprise. Focus on causative factors relating to the mental health of teachers and students, and ways of arranging classroom environments which maximize learning and minimize threat and self devaluation. Prerequisite: 20:030 or equivalent.

20:130(g). Understanding Students With Learning Problems: Case Studies — 3 hrs.

The evaluation and planning process for the education of students with learning problems through simulated and actual case studies to provide context for discussion and research of issues in the education of students with learning difficulties. Prerequisite: junior standing or consent of instructor.

20:138(g). Psychology of Accident Prevention — 2 hrs.

A foundation for psychological understanding in the field of accident prevention and behavioral problems.

20:139(g). Psychology of Personality, Education — 3 hrs.

A thorough investigation of the dynamics of personality, with emphasis on the principles of normal personality structure. Designed for those who seek an understanding of the structure, development and function of personality.

20:140(g). Social Psychology, Education — 3 hrs.

An intensive study of the behavior of man as affected by, and when interacting in, groups. Areas of discussion include prejudice, propaganda, anti-intellectualism, leadership, social perception, group dynamics, game theory, and student protest.

20:141(g). Topics in Values Education — 2 hrs.

Exploration of theories, techniques, and methods for expressing and examining beliefs, values, and feelings in the classroom.

20:142(g). Abnormal Psychology, Education — 3 hrs.

This course deals with psychodynamics. The development of both normal and abnormal personalities is traced with an emphasis on application of sound developmental principles. 20:118 recommended to precede.

20:151(g). Current Approaches to Classroom Discipline — 3 hrs.

Strategies and processes designed to improve and maintain classroom control which also preserve and enhance atmospheres leading to increased academic and personal development by the students. Prerequisites: 20:030, 20:040, or their equivalent; junior standing.

20:180. Field Experiences: Urban Education — 2 hrs.

Tutorial experience in multicultural school setting. Collateral seminar for sharing personal insights and discussion of core readings on cultural pluralism. May be repeated once for credit.

20:187(g). Multicultural Studies: Equality in Education — 3 hrs.

Origin and nature of cultural differences and their psychological impact upon children and youth. Evaluation of learning alternatives designed to improve educational opportunity and pupil performance.

20:189(g). Seminar in Educational Psychology — 1 hr.

Provides the opportunity of correlating previous course work and knowledge in the field of educational psychology. For senior psychology majors and minors. Must be taken twice, one semester hour each during the senior year. May be taken by graduate students with permission of the department. (May be repeated once for credit.)

20:191(g). Supervision of Student Teaching — 3 hrs.

Designed primarily for those presently or potentially involved in the supervision of student teachers. Covers the selection and preparation of student teachers; readiness for student teaching; principles of supervision; including the identification and analysis of good classroom procedures desirable experiences for the student teacher in the total school program; professional responsibilities of the student teacher in the school and community; evaluation of student teachers, and the supervising teacher's role in the selection of teachers for the profession. It also covers the selection and preparation of student teaching centers, qualifications of supervising teachers and the role of the coordinator of student teaching.

20:193(g). Research Experience in Educational Psychology — 2-6 hrs.

Research participation and/or independent supervised research including experience in each of the following: Search of the literature; analysis of theoretical issues; design, instrumentation, and conduct of one or two major experiments; analysis of results; and preparation of research reports. Prerequisite: 15 hours in educational psychology or in some other field of psychology and permission of the department. A total of six semester hours of credit may be allowed.

20:194(g). Clinical Experience — 1-4 hrs.

Practice in educational testing, mental testing, interviewing, guidance and counseling, remedial educational procedures; and formulation of follow-up procedures. Prerequisite: department approval.

20:198. Independent Study**20:210. Motivation in Educational Settings — 3 hrs.**

Examination of personal, developmental, and situational factors that influence motivation to learn; and the resolution of motivational problems unique to formal educational settings. Prerequisite: Minimum of 6 hours of educational psychology or consent of instructors.

20:214. Advanced Educational Psychology — 3 hrs.

Application of selected psychological models as alternative solutions to educational problems.

20:230. Theories of Personality — 3 hrs.

Critical examination of the nature of personality theory, and a detailed analysis of the major contemporary theories of personality.

20:235. Theories of Human Development — 3 hrs.

Major theories of human development (e.g., psychoanalytic, cognitive, developmental, humanistic, and social learning theory). Includes study of noted theorists in each area and educational implications and applications of their work. Prerequisite: 20:100 or 20:109 or 20:116.

20:240. Introduction to School Psychology — 2 hrs.

Nature of the psychological services in the schools; observation of classrooms and activities of various special services personnel. Includes literature of roles and goals of the school psychologist.

20:241. Topics in Educational Psychology — 3 hrs.

Examination of results and implications of contemporary educational research upon teaching and learning. Emphasis upon empirical studies in the area of personality, learning, and developmental psychology.

20:270. Psychology of Learning Disabilities — 3 hrs.

Exploration of learning models, integrated with critical review and use of diagnostic test instruments. Development of interpretative skills and adaptations of teacher methods through case study data and clinical experience. Prerequisite: 25:181.

20:273. Behavior Disorders in Children — 3 hrs.

Problems of children who deviate from the norm in behavior and adjustment, including deviations which are organic as well as those which are functional in nature. Observations of clinical procedures.

20:285. Readings.

20:289. Seminar in Education and Psychology — 2 hrs.

Prerequisite: instructor's consent.

20:290. Practicum in Education and Psychology — 2-4 hrs.

Prerequisite: instructor's consent.

20:291. Internship in School Psychology — 2-6 hrs.

Supervised off-campus field experience.

20:299. Research.

20:314. Advanced Educational Psychology — 3 hrs.

Study of theoretical teaching-learning models that can be used to examine, interpret, and evaluate proposals that advocate changes in the aims, organization, and conduct of American education. Prerequisite: 20:214 or departmental approval.

Tests, Measurement, and Research

25:050. Classroom Evaluation Instruments — 3 hrs.

Introduction to classroom evaluation instruments; includes preparation and use of teacher-constructed assessment devices and purposes and interpretation of standardized instruments. Prerequisites: 20:017; 20:030. 25:050 must be taken prior to or the same semester as 20:040.

25:180(g). Statistical Methods in Education and Psychology — 3 hrs.

Introduction to statistical methods. Includes graphing techniques, measures of central tendency and variability, correlation, t-tests, one way ANOVA, and chi-square. 2 hr. lab. arr.

25:181(g). Group Evaluation Techniques — 3 hrs.

Measurement and evaluation in the instructional programs of elementary and secondary schools. Utilization of standardized group instruments in measuring aptitude, intelligence, achievement, interest, and personality.

25:185(g). Essentials of Measurement and Evaluation — 2 hrs.

Principles of measurement and evaluation applied to the preparation and analysis of classroom appraisal devices. Provides teachers a basis for assessing individual differences, planning instruction and communicating educational outcomes. Designed for students with a minimum background in the foundations of measurement or teaching experience. No credit for student with credit in 25:050.

25:189(g). Seminar in Education — 2-3 hrs.

25:205. Educational Research — 3 hrs.

Methods and evaluation of educational research. Individual exploration of a possible thesis or research project in cooperation with student's adviser or director of the study.

25:270. Educational Program Evaluation — 3 hrs.

Examination of models, data-gathering methods, analysis, and report preparation for educational program evaluation; attention to application of evaluation research to specific school and non-school settings.

25:280. Theory and Construction of Tests — 2 hrs.

An advanced course in the theory of test construction and practical application of the theory to actual construction and validation processes. Prerequisite: 25:180 and 25:181.

25:281. Topics in Statistical Analysis — 3 hrs.

Application of statistical principles to research in education and psychology. Topics selected from: correlational analysis; analysis of variance; sampling in education research; chi-square, t, and F distributions. Emphasis on statistical inference. Prerequisite: 25:180 or the equivalent.

25:282. Psychodynamics I — 3 hrs.

Standardization, crossvalidation, administration, scoring, and elementary interpretation of: Stanford-Binet Scale, Wechsler Preschool and Primary Scale, Wechsler Intelligence Scale for Children, Wechsler Adult Intelligence Scale.

25:283. Psychodynamics II — 3 hrs.

Assessment of quantitative and qualitative potentialities of basic IQ tests (Stanford-Binet and Wechsler instruments), and use of projective instruments (House-Tree-Person test, TAT, CAT, Rorschach) to complement findings from conventional cognitive measures.

25:284. Psychodynamics III — 3 hrs.

Use of test studies to understand behavioral styles of individual students; includes interpreting tests and observational data in discussion with parents and school and community personnel.

25:285. Readings.

25:289. Seminar in Evaluation and Research.

25:299. Research.

25:300. Descriptive Educational Research — 3 hrs.

An examination of theoretical and practical aspects of survey research including sampling, instrumental design and administration, and the application of computer techniques to the analysis of survey information. Prerequisites: 25:180, 25:281, and 25:294 or departmental approval.

25:301. Advanced Experimental Research in Education — 3 hrs.

Relationships between scientific research, theory construction and ethical principles; true-experimental and quasi-experimental designs; univariate, factorial and multivariate analyses with appropriate computer applications; critical review of experimental literature and preparation of research manuscripts. Prerequisites: 25:180, 25:281, and 25:294 or departmental approval.

25:302. Qualitative Methods in Educational Research — 3 hrs.

The study of the techniques of direct observation and analysis of human behavior in ongoing, naturalistic settings. The focus will be on the problems associated with the two main approaches used in qualitative research — participant observation and in-depth interviewing. Prerequisites: 25:180, 25:281, and 25:294 or departmental approval.

Social Foundations

26:020. Introduction to Teaching as a Profession — 3 hrs.

For the undecided individual to explore the personal and professional considerations associated with a decision to teach.

26:118. Social Foundations of Education — 4 hrs.

The school as a social institution; organized and informal community controls; current philosophies of education; the history of education; teacher responsibilities for the curriculum and professional ethics. Prerequisite: 20:014. To accompany student teaching.

26:119. Schools and American Society — 4 hrs.

Relationship of schools and American society from sociological, historical, philosophical, political, and economic perspective. Focus on central characteristics of the educational system and influence of these on teachers as professionals and teaching as a profession. Prerequisites: 20:018; 20:040; 25:050.

26:120(g). Sociology of Education — 3 hrs.

Examination of the sociology of classroom learning and the role of schooling in social stratification and social mobility.

26:121(g). Rural Education: Field Study — 2 hrs.

Study of the sociology of education in a village or town of fewer than 2,500 people, with visits and participation in school and non-school sites to study the school(s) and related community. Also recommended for foreign students. Prerequisites: 20:018; 20:040; 25:050; 26:119.

26:134(g). History of Education — 3 hrs.

Education as a formal institution; emphasis on the historical antecedents which have affected education in Western Culture and America.

26:135(g). Critics of Education — 3 hrs.

Criticism of American schooling developed since the 1950's; social implications of various movements to reform the schools, establish alternatives to schools, and to deschool society.

26:138(g). Comparative Education — 3 hrs.

A panoramic view of the educational systems of various nations of the world compared with the education of the United States of America.

26:140(g). Alternatives in Public Education — 3 hrs.

Alternatives to conventional schooling currently in existence within the framework of public education; nature, purposes, goals, and accomplishments of various alternatives, and evaluation of the alternatives.

26:143(g). Low-Income Families: Educational Ideologies and Myths — 3 hrs.

Analysis of literature on disaffected and/or non-achieving students and their social milieu; emphasis on explanatory models and programs designed to improve the educational achievement of poor, minority, and/or non-achieving students. Prerequisites: junior standing and consent of instructor.

26:189(g). Seminar in Social Foundations — 2-3 hrs.

26:220. Sociological Perspectives on Schooling — 3 hrs.
Sociological ideas, issues, and processes such as role theory, reference-group theory, social control, social stratification and socialization will be studied and applied to the social structures and current issues and problems facing professionals in education.

26:234. Philosophy of Education — 3 hrs.

Analytical study of major philosophical viewpoints of modern education, emphasis on professional problems of education and the development of educational principles.

26:235. History of American Education — 3 hrs.

The study of education as a social institution with emphasis on the historical antecedents which have shaped present educational practice in the United States.

26:299. Research.**26:334. Advanced Philosophy of Education — 3 hrs.**

Philosophical analysis of the logic of education. Development of educational policy and program positions based upon the results of philosophical thought. Prerequisite: 26:234 or departmental approval.

English Language and Literature

*Robbins, Head, Baughman, Cahill, Cawelti, Copeland, Day, DeHoff, C. Eblen, *Gaies, Gish, Goldstein, Goodman, HiDuke, G. Hovet, T. Hovet, Hubly, Jewell, V. Johnson, Kalmar, Klinkowitz, LaRocque, Loritz, Lounsberry, Rackstraw, T. Remington, O. Schmidt, Shields, Swensen, N. Thompson, R.J. Ward, *R. Wilson, E. Wood.*

*on leave

English Major — Teaching

Required: 62:034; 62:042; 62:043; 62:052; 62:060;	
62:165; 62:190; 62:191; 62:193; 63:130; 23:130 ..	29-30 hours
Required: 62:103; 62:104; 61:105, or 66:140	3 hours
Required: 63:125 or 63:143 or 63:190	2-3 hours
Electives in department, to include at least 6 hours of	
100-level courses in literature	9-11 hours
	45 hours

Note: Prerequisites for student teaching in English are: a grade average of 2.5 in English major courses, and a grade of C or better in 62:190.

English Major

Required: 62:034; 62:042; 62:043; 62:052; 62:060 ...	15 hours
Required: one of the following: 62:103; 62:104;	
62:105; 62:174; 62:175; 66:140	3 hours
Required: 63:125 or 63:130 or 63:143	3 hours
Electives in department, to include at least 12 hours	
of 100-level courses in literature	21 hours
	42 hours

Teaching English to Speakers of Other Languages Major (TESOL)

Required: one of the following: 62:103; 62:104;	
62:105; 66:140	3 hours
Required: 62:034; 62:042; 62:052	9 hours
Required: 63:130; 63:125 or 63:143; 63:154; 63:156;	
63:192; 63:194; 63:197	19 hours
Electives in literature or linguistics	9 hours
	40 hours

Note: International students must have achieved a TOEFL score of 600 or the equivalent in order to demonstrate their proficiency in English. An international student may be required to take additional English by attending 63:105 or 63:106 at the discretion of the TESOL and Linguistics faculty. 63:105 and 63:106 may not be counted for credit on the TESOL program.

It is strongly recommended that native speakers of English majoring in TESOL or Linguistics programs demonstrate a basic competence in a foreign language either by obtaining at least a C grade in the second semester of a language course or by passing a proficiency examination.

Since these courses are given in a two-year sequence it is desirable for the student to begin the sequence at the beginning of the sophomore year. No foreign language is required.

This major does not make one eligible for certification to teach.

English Linguistics Major

Required: 62:034; 62:042; 62:052; and one of the following: 62:103, 62:104, 62:105, or 66:140 . . .	12 hours
Required: 63:010; 63:125; 63:130; 63:143; 63:145; 63:156; 63:154; 63:158	24 hours
Cognate electives: minimum of 6 hours from 40:118; 51:105; 51:106; 63:198; 65:119; 80:169; 81:101 . .	6 hours
	<u>42 hours</u>

It is strongly recommended that native speakers of English majoring in TESOL or Linguistics programs demonstrate a basic competence in a foreign language either by obtaining at least a C grade in the second semester of a language course or by passing a proficiency examination.

English Minor — Teaching

Required: 62:034; 62:042; 62:043; 62:052; 62:190; 63:130	18 hours
Required: one of the following: 62:103, 62:104, 62:105, 66:140	3 hours
Required: 62:193 or 23:130	3 hours
	<u>24 hours</u>

This minor requires a minimum cumulative grade point average of 2.25 in English courses.

English Minor

Required: 62:034; 62:042; 62:043; 62:052; 62:060 . . .	15 hours
Required: 63:125 or 63:130	3 hours
	<u>18 hours</u>

Teaching English to Speakers of Other Languages Minor (TESOL)

Required: 63:130; 63:154; 63:156; 63:192; 63:194; 63:197	16 hours
--	----------

Since these courses are given in a two-year sequence it is desirable to begin the sequence at the beginning of the sophomore year. No foreign language is required.

Business Communications Minor

This interdisciplinary minor is offered jointly by the College of Humanities and Fine Arts and the School of Business, and is under the jurisdiction of the departments of English Language and Literature, Business Education and Administrative Management, and Communication and Theatre Arts. The minor requires a 12-hour core plus six (6) hours from one of three emphases:

Required core: 50:138; 50:163; 62:104; 62:105	12 hours
Required: six (6) hours from one of three emphases	6 hours
	<u>18 hours</u>

Emphases —

Business: 18:113; 18:114
 English: two of the following: 66:102; 66:141; 66:150
 Speech: 50:183; 50:184; 50:185

Students pursuing this minor should consider taking 50:026 and 62:003 as general electives.

Journalism Minor — Teaching and Liberal Arts

Required: 66:032; 66:040; 66:140	9 hours
Electives: at least 6 hours from the following: 66:102; *66:103; 66:104; 66:105; 66:131; 66:132; 66:141; 66:150; 66:110; 66:186; 66:198; 24:147	6 hours
	<u>15 hours</u>

*Recommended for students on the teaching program.

English Linguistics Minor

Required: 63:125; 63:145; 63:154; 63:156; 63:158 . . .	14-15 hours
--	-------------

Language Arts Subject Field — Middle School/Junior High Education Major

Required: one of the following: 62:003, 62:103, 62:104	3 hours
Required: 62:034; 62:042 or 62:043; 62:052 or 62:053	9 hours
Required: 62:165; 62:190; 63:130	8 hours
Electives in English	3 hours
	<u>23 hours</u>

(*See Department of Curriculum and Instruction, page 68).

Note: Three interdepartmental programs offered cooperatively by the Department of Modern Languages and the Department of English Language and Literature are listed on pages 00 and 00. These are TESOL/Modern Language Major — Teaching, English Linguistics and Modern Language Combined Major, and Comparative Literature Minor.

English**62:001. Writing: Fundamentals — 3 hrs.**

May not be taken for credit by those who have passed the Writing Competency Examination or by those who have passed any of the following: 62:003, 62:034, 62:103, 62:104, 62:105, 66:040, 66:140.

62:003. Intermediate Writing: Exposition — 3 hrs.

Exploring and communicating ideas; emphasis on various prose patterns and techniques. Prerequisite: pass on Writing Competency Examination (does not apply to students enrolled prior to Fall Semester 1978) or 62:001. Does not count for credit on any English major or minor.

62:020. Science Fiction — 3 hrs.

Development of modern science fiction. Current trends; parallels and contrasts between science fiction and "literary" fiction.

62:031. Introduction to Literature — 3 hrs.

Understanding and appreciating the basic forms of imaginative literature. May not be taken for major or minor credit.

62:034. Critical Writing About Literature — 3 hrs.

Practice in analysis of poetry, drama, and fiction. Prerequisite: pass on Writing Competency Examination or 62:001.

62:035. Introduction to Film — 3 hrs.

An examination of an introductory level of four film genres: Narrative, documentary, animated, experimental; preparation for further work, either individually or academically.

62:041. Non-Western Literature — 3 hrs.

Short stories, essays, novels, plays, and poems from modern India, China, Japan, Africa, and Latin America.

62:042. Tradition of British Literature to 1800 — 3 hrs.

Major trends and masterpieces from Medieval, Renaissance, and 18th Century periods: 700-1800.

62:043. Tradition of British Literature since 1800 — 3 hrs.

Major trends and masterpieces from the Romantic, Victorian, and Modern periods: 1800 to present.

62:044. Popular Literature: _____ — 3 hrs.

Offered on diverse topics (e.g., mystery and crime fiction, the romance, the western) to be announced in Schedule of Classes. May be repeated for credit only by taking different topics.

62:052. The Tradition of American Literature — 3 hrs.

Broad trends and important writers in the American literary tradition, from 1620 to 1950. Strongly recommended to precede advanced-level courses in American literature.

62:053. American Masterpieces — 3 hrs.

Selected works by major American writers from Colonial times to present. Does not count for credit on English majors or minors.

62:055. Native American and Chicano Literature — 3 hrs.

Introductory study of selected American Indian and Chicano literature in a variety of forms: fiction, poetry, drama, myth, and legend. Does not count for credit on English majors or minors.

62:057. Afro-American Literature — 3 hrs.

A study of Black writers in America. Does not count for credit on English majors or minors.

62:060. Tradition of European Literature to 1650 — 3 hrs.

Masterpieces of Western literature from the beginnings to 1650.

62:061. Tradition of European Literature since 1650 — 3 hrs.

Masterpieces of Western literature from 1650 to present.

62:070. Creative Writing — 3 hrs.

Initial experiences in writing of fiction or poetry. May not be repeated for credit.

62:103. The Personal Essay — 3 hrs.

Writing various types of essays, (e.g., narrative, descriptive, expository, persuasive); attention to stylistic questions and possibilities. Prerequisites: Pass on Writing Competency Examination; junior standing or consent of instructor.

62:104. Argument and Persuasion — 3 hrs.

Writing on controversial issues; emphasis on development of evidence and study of audience psychology. Prerequisites: Pass on Writing Competency Examination; junior standing or consent of instructor.

62:105. Report Writing — 3 hrs.

Business, scientific, and technical writing; emphasis on clarity and precision. Scientific or business background not necessary. Prerequisites: Pass on Writing Competency Examination; junior standing or consent of instructor.

62:112(g). European Drama: Ancient Greeks to 1900 — 3 hrs.

Major dramatists of the Western tradition from ancient Greece to 19th-century Europe (in English translation). Prerequisite: 62:034 or junior standing or consent of instructor.

62:113(g). British Drama to 1900 — 3 hrs.

Emphasis on contemporaries of Shakespeare such as Marlow, Jonson, and Webster; also includes selected medieval, Restoration, 18th- and 19th-century dramas. Prerequisite: 62:034 or junior standing or consent of instructor.

62:115(g). Modern Drama — 3 hrs.

American, British and Continental. Prerequisite: 62:034 or junior standing or consent of instructor.

62:116(g). English Renaissance — 3 hrs.

1500-1642. Prerequisite: 62:034 or junior standing or consent of instructor.

62:117(g). 18th Century British Literature — 3 hrs.

Major writers of satire, verse, and prose including Dryden, Swift, Pope, and Johnson. Prerequisite: 62:034 or junior standing or consent of instructor.

62:118(g). British Romantic Writers — 3 hrs.

Early 19th-century writers such as Wordsworth, Keats, Hazlitt, and Scott. Prerequisite: 62:034 or junior standing or consent of instructor.

62:119(g). British Victorian Writers — 3 hrs.

Later 19th-century writers of verse and prose such as Tennyson, Browning, Arnold, Carlyle, Mill, and Ruskin. Prerequisite: 62:034 or junior standing or consent of instructor.

62:120(g). 20th Century British Novel — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:121(g). The American Renaissance — 3 hrs.

Major writers of the 1840's and 1850's: Hawthorne, Melville, Emerson, Thoreau, and early Whitman. Prerequisite: 62:034 or junior standing or consent of instructor.

62:123(g). American Realism and Naturalism to WWI — 3 hrs.

Literary selections 1870 to World War I; emphasis on fiction. Prerequisite: 62:034 or junior standing or consent of instructor.

62:124(g). 20th Century American Novel — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:125(g). Literature of the American South — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:126(g). Short Fiction — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:128(g). Images of Women in Literature — 3 hrs.

Images, symbols, and myths of women in literature; feminist criticism. Prerequisite: 62:034.

62:134(g). Modern British and American Poetry — 3 hrs.

Since 1914. Prerequisite: 62:034 or junior standing or consent of instructor.

62:144(g). Chaucer — 3 hrs.

The poetry of Chaucer; may include other medieval writers. Prerequisite: 62:034 or junior standing or consent of instructor.

62:147(g). Milton — 3 hrs.

Milton's major English poetry and prose. Prerequisite: 62:034 or junior standing or consent of instructor.

62:148(g). Shakespeare — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:153(g). Major American Poets to 1900 — 3 hrs.

Prerequisite: 62:034 or junior standing or consent of instructor.

62:155(g). European Novel — 3 hrs.

Major works of prose fiction by writers such as Cervantes, Stendhal, Flaubert, Dostoevsky, Tolstoy, and Mann (in English translation). Prerequisite: 62:034 or junior standing or consent of instructor.

62:156(g). British Novel to 1900 — 3 hrs.

Major fiction writers, such as Fielding, Sterne, Austen, Dickens, Thackeray, the Brontes, George Eliot, and Hardy. Prerequisite: 62:034 or junior standing or consent of instructor.

62:157(g). Modern Afro-American Literature — 3 hrs.

Selected works by prominent Afro-American writers since 1940. Prerequisite: 62:034 or junior standing or consent of instructor.

62:161(g). Literary Criticism — 3 hrs.

Important modern and traditional critical positions and their application to imaginative literature. Prerequisite: 62:034 or junior standing or consent of instructor.

62:165(g). Literature for Young Adults — 2 hrs.

Reading and evaluation of literature suitable for adolescents. Prerequisite: 62:034 or junior standing or consent of instructor.

62:174(g). Poetry Workshop — 1-6 hrs.

May be repeated for credit. Prerequisite: 62:070 or consent of instructor.

62:175(g). Fiction Workshop — 1-6 hrs.

May be repeated for credit. Prerequisite: 62:070 or consent of instructor.

62:188(g). Seminar in Literature — 3 hrs.

Topic to be announced in Schedule of Classes. Prerequisite: 62:034 or junior standing or consent of instructor.

62:190(g). The Teaching of English — 3 hrs.

Prerequisites: 20:018; 20:040; 25:050 (Level II).

62:191(g). Seminar for the Student Teacher — 1 hr.

An intensive course to integrate 62:190 with the student teaching experience. Offered only on ungraded basis.

62:193(g). The Teaching of Writing — 3 hrs.

62:198. Independent Study.

62:201. Introduction to Graduate Study in English — 3 hrs.

Introduction to the problems, techniques, and tools to graduate-level study and research in English.

62:204. Topics in Literary Criticism — 3 hrs.

Selected problems in the theory of literary art, the history of criticism, and the interpretation of particular works.

62:207. The English Curriculum — 3 hrs.

Theories behind the teaching of English and trends in curriculum methods and materials, particularly in secondary English.

62:221. English Renaissance Literature — 3 hrs.

(1485-1660).

62:223. Restoration and 18th Century English Literature — 3 hrs.

(1660-1798).

62:225. 19th Century English Literature — 3 hrs.

Romantic or Victorian (1798-1900).

62:226. Modern English Literature — 3 hrs.

(1900-1945).

62:231. American Romantic Literature — 3 hrs.

(1800-1870).

62:232. American Realistic and Naturalistic Literature — 3 hrs.

(1870-1912).

62:234. Modern American Literature — 3 hrs.

(1912-1945).

62:260. Contemporary Literature — 3 hrs.

Literature from 1945 to the present; may include poetry, drama, and/or fiction.

62:264. Continental Literature — 3 hrs.

62:284. Seminar in Literature — 3 hrs.

A selected generic, thematic, or critical topic or a specific writer or writers; topic to be announced in Schedule of Classes. May be repeated for credit.

62:291. Seminar in the Teaching of English — 3 hrs.

62:292. Teaching English in the Community College — 3 hrs.

Curriculum and instructional strategies suitable for the community college in meeting the needs of the diverse population of the two-year college.

62:297. Practicum.

Graduate-level student teaching. See p. 00.

62:229. Research.

Linguistics

(See pages 79 and 80 for TESOL and English Linguistics programs.)

63:010. Language and Culture — 3 hrs.

Fundamental concepts used in the study of language, culture, and their interrelationships. Discussion of ethnolinguistic variations and universals.

63:105(g). Spoken English as a Foreign Language — 3 hrs.

Patterns of idioms of English for non-native speakers with guided practice in speaking and comprehension. Offered only on ungraded (credit/no credit) basis. May be taken for graduate credit, but may not be applied to any graduate degree. Prerequisite: consent of instructor.

63:106(g). Written English as a Foreign Language — 3 hrs.

Basic writing skills in English as a foreign language. English grammar paragraph development, guided and free writing. Offered only on an ungraded (credit/no credit) basis. May be taken for graduate credit, but may not be applied to requirements for any graduate degree. Prerequisite: consent of instructor.

63:125(g). Introduction to Linguistics — 3 hrs.

Examination of the major phonological, syntactic, and semantic aspects of a variety of human languages.

63:130(g). The Structure of English — 3 hrs.

Linguistic analysis of the major phonological, syntactic, and semantic properties of modern American English.

63:143(g). History of the English Language — 3 hrs.

Developmental survey of the English language from its beginnings to the present as a product of linguistic change and variation, political history, and social attitude. Prerequisite: 63:125 or 63:130.

63:145(g). Historical and Comparative Linguistics — 3 hrs.

Theories of language change and diversification. Discussion of genetic and typological and classification, reconstruction, dialect emergence, and linguistic universals. Prerequisite: 63:125 or 63:130.

63:154(g). Phonology — 3 hrs.

The sound systems of human languages, including articulatory and acoustic phonetics, structural phonemics, distinctive features, and generative phonology. Prerequisite: 63:125 or 63:130.

63:156(g). Syntax — 3 hrs.

Theories of grammar from a generative-transformational point of view with special emphasis on English syntax. Prerequisite: 63:125 or 63:130.

63:158(g). Semantics — 3 hrs.

Traditional and recent theories of meaning in language. Prerequisite: 63:125 or 63:130.

63:160(g). Sociolinguistics and Dialectology — 3 hrs.

Language variation as an expression of socioeconomic, geographic, and personal status. Prerequisite: 63:132 or 63:134 or 63:145.

63:190(g). Applied English Linguistics for Teachers — 3 hrs.

Linguistic insights applied to study of language use — writing, reading, spelling, and vocabulary; for prospective and current teachers of English. Prerequisites: 63:125 or 63:130; junior standing or consent of instructor.

63:192(g). Problems in English Grammar — 3 hrs.

Prerequisite: 63:125 or 63:130.

63:194(g). Teaching English to Speakers of Other Languages (TESOL) — 3 hrs.

Methods and materials. Classroom practices, textbooks, language laboratory, testing. Prerequisite: 63:125 or 63:130.

63:197 TESOL Practicum — 1 hr.

Practical experience in teaching English to speakers of other languages. Corequisite: 63:194.

63:198. Independent Study.

63:254. Seminar in Phonology — 3 hrs.

63:256. Seminar in Syntax — 3 hrs.

63:258. Seminar in Semantics — 3 hrs.

63:280. Topics in Linguistics — 1 hr.

An open forum for discussion of crucial issues in the theory and application of linguistics. Maximum of 3 credit hours.

63:285. Seminar in Language — 3 hrs.

Topic to be announced in Schedule of Classes; may be repeated for credit.

63:292. Second Language Acquisition — 3 hrs.

Theories of second language acquisition, primarily as reflected in two approaches: contrastive analysis and error analysis. Investigation of social and psychological variables related to second language learning and applications for classroom teacher.

63:295. Language Testing — 3 hrs.

An examination of the basic approaches and techniques for constructing and interpreting language tests.

63:297. Practicum.

Graduate-level student teaching of English as a foreign language.

63:299. Research.**Journalism**

(See page 80 for Journalism minor.)

66:032. Introduction to Mass Media — 3 hrs.

Technical and critical survey of print and electronic media, and related fields.

66:040. Reporting and News Writing — 3 hrs.

News values; methods of obtaining, verifying, and presenting news. Prerequisite: minimum 30 words per minute typing skill.

66:102(g). Magazine Article Writing — 3 hrs.

Writing and marketing different types of articles for various publications.

66:103(g). High School Newspaper and Yearbook — 3 hrs.

Advising school publications; staff organizations; methods of printing; policies, style, content, textbooks, business management. Prerequisite: 66:040 or consent of instructor.

66:104(g). Journalism Laboratory I — 1 hr.

Practical experience in gathering and writing news stories for local media, especially campus publications. May be repeated for a total of 3 hours. Prerequisite: 66:040 or consent of instructor.

66:105(g). Journalism Laboratory II — 1 hr.

Writing feature, investigative, and interpretive articles for local media, especially campus publications. May be repeated for a total of 2 hours. Prerequisite: 66:040 or consent of instructor.

66:110(g). Field Experience in Journalism — 1-6 hrs.

Student works with local newspaper and/or local agency which produces newsletters, brochures, and press releases to gain on-the-job experience in the print media. Prerequisites: 66:040; 66:140; and at least junior standing, and consent of instructor.

66:131(g). History of Mass Communications — 3 hrs.

Development of American newspapers and periodicals, from early beginnings in Europe to present day; rise of radio and television.

66:132(g). Mass Communication Law — 3 hrs.

Origins and backgrounds of press law; libel and its defenses, penalties, right of privacy; problems of fair trial. Law and self-regulation in advertising, in broadcast media.

66:140(g). Advanced Reporting — 3 hrs.

Gathering information and writing of complex news stories; emphasis on the social, legal, and moral rights and responsibilities of the journalist. Prerequisite: 66:040 or consent of instructor.

66:141. Feature Writing — 3 hrs.

Writing feature articles for publication. Prerequisite: 66:040 or consent of instructor.

66:150(g). Editing and Design — 3 hrs.

Copyreading, proofreading, writing headlines; studying make-up, typography, and photography.

English/Modern Language Programs

The following three programs are offered cooperatively by the Department of English Language and Literature and the Department of Modern Languages, and are under the joint jurisdiction and supervision of these two departments.

TESOL/Modern Language Major — Teaching
English Linguistics and Modern Language Combined Major
Comparative Literature Minor

Advisers for these programs are assigned by the respective department heads.

English Linguistics and Modern Language Combined Major

This major is offered cooperatively by the Department of English Language and Literature and the Department of Modern Languages, and is under the joint jurisdiction and supervision of these two departments.

Required core: 62:034; 62:103 or 62:104 or 62:105 or
66:140; 63:145; 63:154; 63:156; 63:192; 63:125 or
63:130; 70:105 or 70:110 or 70:120 or 70:180; and
electives in linguistics to make 30 hours
Required: 27 hours from one of the language emphases*
below 27 hours
57 hours

***Emphases —**

French: 27 hours beyond 72:002, including 72:072, and at least one course in civilization, literature, and translation/linguistics.

German: 27 hours beyond 74:002, including 74:071, and at least one course in civilization, literature, and translation/linguistics.

Spanish: 27 hours beyond 78:002, including 78:071, and at least one course in civilization, literature, and translation/linguistics.

TESOL/Modern Language Major — Teaching

This major is offered cooperatively by the Department of English Language and Literature and the Department of Modern Languages, and is under the jurisdiction and supervision of these two departments.

Required core: 62:034; 62:103 or 62:104 or 62:105 or
66:140; 63:130; 63:154; 63:156; 63:192; 63:194;
63:197; 70:105 or 70:110 or 70:120 or 70:180; and 5-6
hours of linguistics courses 30 hours
Required: 30 hours from one of the language emphases*
below 30 hours
61 hours

***Emphases —**

French: 72:011; 72:051 (3 hrs.); 72:061 (2 hrs.); 72:072; 72:101;
72:108; 72:124 or 72:125; 72:180; 70:190; at least one 3-hour
French literature course.

German: 74:011 (5 hrs.); 74:052 (3 hrs.); 74:062 (2 hrs.); 74:071;
74:101; 74:107; 74:123; 74:180; 70:190; and electives in German to
make 30 hours.

Spanish: 78:051 (2 hrs.); 78:052 (2 hrs.); 78:061 (3 hrs.); 78:062 (3 hrs.); 78:071; 78:101; 78:107; 78:123 or 78:140 or 78:152; 78:180 or 78:185 or 78:195; 70:190; and electives in Spanish to make 30 hours.

Note: International students must have achieved a TOEFL score of 600 or the equivalent in order to demonstrate their proficiency in English. An international student may be required to take additional English by attending 63:105 or 63:106 at the discretion of the TESOL and Linguistics faculty. 63:105 and 63:106 may not be counted for credit on the TESOL program.

Comparative Literature Minor

This is an interdisciplinary minor administered jointly by the Department of English Language and Literature and the Department of Modern Languages.

Required: 70:105; 70:110 or 70:120; 62:161 9 hours

A 100-level course in English literature 3 hours

Electives:

For Foreign Language Majors —

70:180 4 hours

English literature at the 100-level (excluding

62:144, 62:147; 62:148 3 hours

For Non-Foreign Language Majors —

70:180 4 hours

7x:071 or 7x:072 (available in French, German or Spanish) 3 hours

19 hours

A reading knowledge of one foreign language is required.

This minor is designed for foreign language majors and students of English literature who demonstrate a reading knowledge of a foreign language. Other students who can demonstrate a reading knowledge of a foreign language may also enroll.

Geography

Nijim, Head. Austin, Chung, Clark, Fryman, Lu, Yarnal.

Geography Major — Teaching

Required: 90:190; 97:010 or 97:025; 97:031; 97:060; 97:109; 97:150; 97:180 19-22 hours

Required: 97:120 or 97:132 3 hours

Required: 97:130 or 97:170 or 97:185 3 hours

Electives in geography 8-11 hours

36 hours

Either 97:010 or 97:025 shall be taken for a geography major or minor; the course not selected may not be counted as either elective or required hours on any geography program.

A minor in another teaching area is required.

Geography Major

Required: 97:010 or 97:025; 97:031; 97:060; 97:109; 97:150; 97:180 16-19 hours

Required: 97:120 or 97:132 3 hours

Required: 97:130 or 97:170 or 97:185 3 hours

Electives in geography 11-14 hours

36 hours

Either 97:010 or 97:025 shall be taken for a geography major or minor; the course not selected may not be counted as either elective or required hours on any geography program.

Geography Minor — Teaching and Liberal Arts

Required: 97:010 or 97:025 or 97:031 2-4 hours

Required: 97:150 2-3 hours

Electives in geography 13-16 hours

20 hours

Either 97:010 or 97:025 shall be taken for a geography major or minor; the course not selected may not be counted as either elective or required hours on any geography program.

97:010. Human Geography — 2 hrs.

Interaction between peoples and their environments. Spatial patterns and processes of: population distribution, population characteristics, population movement, human environmental impact, economic activity.

97:025. World Geography — 3 hrs.

Reasons for and consequences of variations over the surface of the earth of cultural, economic, physical, and other attributes of places.

97:031. Elements of the Natural Environment — 4 hrs.

Survey of major elements of the physical environment; emphasis on interaction of processes resulting in spatial variations of weather and climate, landforms, soils, and vegetation, and on the areal associations among environmental components. Lecture, 3 periods; lab., 2 periods.

97:050. Communicating Through Maps — 2 hrs.

The map as a communication tool, from perspectives of map maker and map user. Representation of same data in different ways.

97:060. Introduction to Cartography — 3 hrs.

Basic knowledge and skill in map making. Map essentials, map symbols, kinds of projection, field mapping, and the use of air photos. Lecture, 2 periods; lab., 2 periods.

97:105(g). Advanced Cartography — 3 hrs.

Application of cartographic principles and techniques in compiling special purpose maps. Emphasis on thematic maps, techniques of computer mapping, and map reproduction. Lecture, 2 periods; lab., 2 periods. Prerequisite: 97:060 or equivalent.

97:107(g). Aerial Photography and Remote Sensing — 3 hrs.

Basic principles of photogrammetry, aerial photo interpretation, and remote sensing; emphasis on interpretation of physical and cultural phenomena on the earth's surface. Analysis of imagery obtained through aircraft or satellite-borne cameras and other remote sensors of electromagnetic emission.

97:109(g). Quantitative Methods in Spatial Analysis — 3 hrs.

Application of selected mathematical models and statistical techniques (descriptive and inferential) to the analysis of spatially varying phenomena. Lecture, 2 periods; lab., 2 periods. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:110(g). Climatology — 3 hrs.

Fundamentals of general climatology. Climatic classification and the geographical distribution of climatic types. Focus on climate as a principal component of our physical environment. Prerequisite: 97:031 or consent of instructor.

97:112(g). Landform Analysis — 3 hrs.

Analysis of processes by which geomorphic agents shape the landscape and examination of resulting landforms. Prerequisites: 97:031 or consent of instructor.

97:115(g). Soils — 3 hrs.

The nature and properties of soils; their origins, development, classification, uses, and management. Discussion, 2 hrs.; lab., 2 hrs.

97:120. Economic Geography — 3 hrs.

Analysis of the location and spatial structure of economic activities in major world regions. May provide credit in Economics. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:125(g). Transportation Planning and Analysis — 3 hrs.

The structure of transportation systems and their role in social and economic interaction; methods of transportation analysis; models of transportation planning. Prerequisite: 97:120 or 97:132 or equivalent.

97:130(g). Cultural Geography — 3 hrs.

A systematic study of cultural geography, with emphasis on the cultural elements of the landscape, their processes, area association and differentiation. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor; and junior standing.

97:132. Urban Geography — 3 hrs.

The association of the activities in urban areas as expressed in characteristic associations of land use and occupancy features. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:135(g). Urban Land Use and Planning — 3 hrs.

Theories and models of urban form, structure, and land use. Public policy and urban planning methods emphasized. Prerequisite: 97:132 or equivalent.

97:136(g). Rural Land Use and Planning — 3 hrs.

Physical, economic, and cultural factors that influence the patterns of rural land use; emphasis on governmental policy and planning methods as applied to rural land use patterns within the United States. Prerequisite: 97:120 or equivalent.

97:140(g). Historical Geography of a Selected Region — 2-3 hrs.

Processes involved in the evolution of the cultural and physical landscape of a selected region; analysis of specific landscapes at different time periods and changes through time of specific features. May be repeated for credit only by taking different regional sections. Region(s) to be announced in Schedule of Classes. Prerequisites: 97:010 or 97:025 or 97:031 or consent of instructor; and junior standing.

97:142(g). Regional Analysis and Planning — 3 hrs.

Location theory and methods of regional science applied to the study of regional structure and the problems of regional planning. Prerequisite: 97:120 or equivalent.

97:150(g). Regional Geography — 2-3 hrs.

Detailed study of the characteristics of one region (e.g., Anglo-America, South America, Europe, Middle East, Iowa). May be repeated for credit only by taking different regional sections. Region(s) to be announced in Schedule of Classes. Prerequisite: 97:010 or 97:025 or equivalent; junior standing or consent of instructor.

96:161(g). Field Studies in Geography — 2-3 hrs.

Off-campus experience with preparatory and follow-up classroom study. See current Schedule of Classes for specific area to be studied, credit hours, and prerequisites. May be repeated in different geographical areas for a maximum of 6 hours.

97:162(g). Computer Cartography — 3 hrs.

Introduction to computer graphics emphasizing the utility of the computer in cartography; the employment of current cartographic display hardware and software systems, and the applications of computer mapping to geographic problems. Prerequisite: 97:060 and junior standing, or consent of instructor.

97:170(g). Political Geography — 3 hrs.

Prerequisite: 97:010 or 97:025 or 97:031 or consent of instructor; and junior standing.

97:177. Internship in Geography — 1-3 hrs.

Practical experience in business, industry, or a government agency. Prerequisite: 8 credit hours of geography course work and approval of the head of the department. May be repeated for a maximum of 6 credit hours.

97:180. Senior Seminar in Geography — 2-3 hrs.

Specific issues, problems, and/or topics examined through application of geographic principles and use of geographic analysis. Research paper required. Prerequisite: minimum of 90 semester hours; 15 hours of geography to have been completed no later than end of semester in which seminar is taken.

97:182. Conservation and Management of Resources — 3 hrs.

The use and management of natural resources, including studies of environmental issues. Prerequisite: 97:010 or 97:025 or 97:031.

97:185(g). Population Geography — 3 hrs.

Patterns, models, and process of the spatial structure of population growth, distribution, and movement. Prerequisites: 97:010 or 97:025 or 97:031 or consent of instructor; and junior standing.

97:189. Readings in Geography — 1-3 hrs.

Prerequisite: approval of the head of the department. A total of 3 hours can be applied on the geography major.

97:193(g). The Nature and Scope of Geography — 3 hrs.

Analysis of the various currents of thought concerning the nature, scope, and methodology of geography. Strongly recommended for those declaring an emphasis or major in geography. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:203. Field Methods — 3 hrs.

A survey of geographical field procedures and problems, including measurement techniques, observations, and mapping based on field trips. Prerequisite: Departmental approval. Lab., 2 three-hour sessions.

97:210. Theoretical Geography — 3 hrs.

Philosophy and major theories of modern geographic science. Prerequisite: 97:109 or consent of instructor.

97:277. Internship in Geography — 1-3 hrs.

Practical experience in business, industry, or a government agency. Prerequisite: 8 credit hours of geography course work and approval of the head of the department. May be repeated for a maximum of 6 credit hours.

97:280. Seminar — 3 hrs.

Offered in specially designated areas as indicated in Schedule of Classes. If 6 hours of seminar are taken in the M.A. program, 3 hours must be in systematic geography.

97:285. Readings in Geography — 1-3 hrs.

Prerequisite: Approval of the head of the department.

97:288. Research and Bibliography — 2 hrs.

Introduction to methods of geographical analysis. Scholarly use of source materials and effective presentation of research findings.

97:299. Research.

Health, Physical Education, and Recreation, School of

*Thrall, Head. Ahrabi-Fard, Bakley, Cooper, Cryer, Darling, T. Davis, Dolgener, Doody, East, Erusha, Gladin, E. Green, K. Green, W. Green, Grosso, J. Hall, C. Hanson, Henry, Hensley, Huddleston, King, *Kortemeyer, Marsh, Marston, Mertesdorf, Moffit, Patten, C. Phillips, Pitman, Richards, Sanders, Schwarzenbach, Stodghill, Styck, Swanson, D. Thompson, Yager.*

*on leave

General Education: At least two hours from 42:001 activity courses are required of all students; two additional hours from 41:015 or 42:001 may be elected.

Health Education Major — Teaching

Required: 22:118; 25:180; 31:030; 41:010; 41:015; 41:072; 41:140; 41:142; 41:144; 41:153; 41:160; 41:163; 41:176; 84:031 33 hours
Electives: minimum of 3 courses from Group I, and 2 courses from Group II for minimum total of 17 hours
50 hours

Group I: 20:140; 20:142; 20:151; 22:050 or 22:150; 20:116; 25:181; 31:051; 31:055; 31:152; 40:155; 50:026; 98:100.

Group II: 30:030; 31:057; 31:130; 31:153; 31:155; 40:170; 41:020; 41:028; 41:060; 41:138; 41:146; 41:156; 41:162; 41:164; 42:050; 42:153; 45:171; 68:194; 84:033.

Community Health Education Major

Required: 15:153; 24:131; 25:180; 31:030; 35:010; 41:060; 41:153; 41:156; 41:158; 41:160; 41:163; 41:164; 41:168; 41:176; 45:193; 50:163; 84:031; 94:132 or 45:040 48-54 hours
Electives in health or related areas (with approval of coordinator of health division) 11-17 hours
65 hours

Health Education Minor — Teaching

Required: 41:010; 41:015; 41:072; 41:140; 41:144; 41:153; 41:160 13 hours
Electives: 20:118; 30:030; 31:030; 31:057; 31:155; 40:170; 41:020; 41:028; 41:060; 41:138; 41:142; 41:146; 41:156; 41:162; 41:163; 41:164; 41:171; 41:050; 42:153; 45:171; 68:194; 84:031 or 84:138 9 hours
22 hours

Community Health Education Minor

Required: 41:060; 41:153; 41:156; 41:160; 41:163; 41:176; 84:031 18 hours
Electives in health education or related areas with approval of coordinator of health division 4 hours
22 hours

Athletic Training Minor

Required: 31:030; 41:010; 41:015; 41:175; 41:182; 41:183; 41:184; 41:187; 42:125 or 42:153; 42:151; 84:031 26-27 hours

Physical Education Major — Teaching

Required: 41:010; 41:142; 41:175; 42:043; 42:044; 42:050; 42:151; 42:152; 42:153; 42:160; 42:163; 42:174; 42:176 30 hours
Required advanced skill and coaching theory: one course from 42:101; 42:102; 42:103; 42:104; 42:105; 42:106; 42:107; 42:108; 42:109; 42:110; 42:111; 42:112; 42:113 2-3 hours
*Required fundamental physical activities** in the following: 42:011; 42:012; 42:013; 42:014; 42:015; 42:016 8-13 hours
Required: an *emphasis* in one of the following areas for a minimum of 6 hours
45-52 hours

Emphases:

Aquatics —

Required: 42:001 (Water Safety Instruction); 42:109; 42:120

Electives from 42:001 (Canoeing, Diving, Skin and Scuba, Synchronized Swimming, Water Polo); 42:040 or 42:168; 42:157.

Coaching —

Electives from advanced skill and coaching theory: 42:101; 42:102; 42:103; 42:104; 42:105; 42:106; 42:107; 42:108; 42:109; 42:110; 42:111; 42:112; 42:113; 42:118; 42:122; 42:127.

Dance —

Required: 42:132.

Electives from: 42:001 (Aerobic Dance); 42:001 (Beginning or Intermediate Ballet); 42:031; 42:032; 42:135.

Elementary — Required: 42:040.

Electives from: 21:152; 42:040; 42:132; 42:145; 50:130.

Adapted —

Required: six (6) hours selected in consultation with the specialist in Adapted Physical Education.

*Students with a major in physical education will substitute two (2) hours of activity for 42:001.

**Competency must be demonstrated in 13 activities; however, up to five (5) of these may be met by testing out of the activity. Minimum and maximum number of activities which can be selected in each of these areas are: 42:011 (1-2); 42:012 (1); 42:013 (2-3); 42:014 (1-2); 42:015 (3-4); 42:016 (2-4).

Physical Education Minor — Elementary Teaching

Required: 42:040; 42:043; 42:044 or 42:045; 42:132; 42:145	9-10 hours
Required physical activities (chosen in consultation with department) from: 42:001; 42:011; 42:013; 42:014; 42:015	5 hours
Electives from: 21:152; 41:010; 41:142; 43:164; 42:157; 50:130	7-8 hours
	<hr/> 22 hours

Dance Minor — Teaching and Liberal Arts

Required activities: 42:001 (Aerobic Dance); 42:001 (Beginning or Intermediate Ballet); 42:013 (Folk and Square Dance); 42:013 (Rhythm, Jazz and Creative Movement); 42:013 (Social Dance) or 42:001 (Advanced Social Dance); 42:031	6 hours
Required: 42:132; 42:135; 42:168; 42:185; or 42:198; 50:130	9 hours
Electives from at least two of the following groups for a total of	6 hours
	<hr/> 21 hours

Group I: 42:032; 42:035; 42:040; 42:124

Group II: 24:031; 24:147; 50:024; 50:031; 50:034; 50:102; 50:148; 62:070

Group III: 52:102; 54:xxx (1 hour); 60:001; 60:003; 60:141

Coaching Minor — Teaching and

Coaching Endorsement — Middle School/Junior High School Education Major*

This program carries coaching endorsement for grades K-12. It does not, however, qualify the student for endorsement or certification to teach physical education at any grade level. (*See Department of Curriculum and Instruction, p. 68 for Middle School/Junior High Major Program.)

Required: 42:122; 42:124; 42:125; 42:127; 41:175 .	10 hours
Electives: 4 hours from — 42:101; 42:102; 42:103; 42:104*; 42:105; 42:106; 42:107; 42:108; 42:109; 42:110; 42:111; 42:112; 42:113	4 hours
*42:016 (Football) is recommended to precede 42:104	0-1 hour
	<hr/> 14-15 hours

Note: The student shall have directed or supervised laboratory experience in coaching; ordinarily this would be done during the time of student teaching. The course 42:118 (Practicum in Coaching), 2 hours, is available as a university elective.

Community Recreation Major

Required: 12:030; 41:010; 42:120; 43:010; 43:020; 42:021; 43:030; 43:031; 43:040; 43:041; 43:110; 43:112; 43:114; 43:120; 43:189; 50:035; 50:163	31 hours
Required: 42:184; 43:187	15 hours
Required: 3 hours from 15:153, 18:119, 40:157, 40:158	3 hours
Electives: 11 hours from one of the seven areas of emphasis listed below	11 hours
	<hr/> 60 hours

Emphases

Aquatics —

Required: 42:124; 42:125

Required competency: current WSI certification

Electives: 7 hours from: 42:001 or 42:011 (WSI, canoeing, diving, scuba, water polo, synchronized swimming, advanced swimming — 1 hour each); 42:109; 42:117 (swimming); 42:118 (swimming); 42:157; 42:168 (aquatic activity); 42:181.

Art —

Electives selected from courses leading to Art minor for 11 hours.

Camping —

Required: 43:144

Electives: 9 hours from: 42:001 (WSI, scuba, canoeing, archery, backpacking); 43:140; 43:141; 43:142; 50:130; 60:055; 82:132; 84:022; 84:168; 84:180.

Dance —

Required: 42:124; 42:125

Electives: 7 hours selected in consultation with dance specialist.

Music —

Electives: 11 hours selected from courses leading to Music minor.

Sports —

Required: 42:124; 42:125

Required activity: 3 hours from: 42:001; 42:011; 42:012; 42:013; 42:014; 42:015; 42:016.

Electives: 4 hours from: 41:175; 42:045; 42:168; maximum of 2 hours from 42:101, 42:102, 42:103, 42:104, 42:105, 42:106, 42:107, 42:108, 42:109, 42:110, 42:111, 42:112, 42:113; maximum of one hour in 42:117.

Theatre —

Electives from 50:051; 50:053; 50:130; 50:134; 50:151; 50:153; 50:154; 50:168 for a total of 11 hours.

Therapeutic Recreation Major

Required: 31:055; 41:010; 42:124; 43:010; 43:020; 43:021; 43:030; 43:031; 43:040; 43:110; 43:114; 43:123; 43:160; 43:161; 43:162; 43:163; 43:164; 43:189; 50:035; 50:163	37 hours
Required: 43:184; 43:187	15 hours
Electives: 9 hours from the following: 18:119 or 40:157 or 40:158; 20:118; 20:142; 22:050 or 22:150; 29:105; 41:172; 42:157; 43:140; 43:166; 50:130; 50:170; 60:055; 98:121; 98:125	9 hours
	61 hours

Health

41:010. First Aid and Personal Safety — 2 hrs.

May be offered as (1) Standard First Aid for one credit, (2) Instructor's First Aid for one credit, or (3) may be offered as a combined course for two (2) credits. American Red Cross certification for those who qualify.

41:015. Personal Health — 2 hrs.

Designed to develop the understandings, attitudes, and practices which contribute to better individual health.

41:020. Maternal and Infant Health — 2 hrs.

Introduction to and preparation for the events surrounding motherhood; emphasis on conception, pregnancy, prenatal health care, childbirth, and development of early infant-handling skills.

41:028. Environmental Health — 2 hrs.

Study of the personal health effects of current environmental health hazards.

41:060. Medical Terminology — 1 hr.

Basic terminology and vocabulary used in medical field: structural organization of the body, major anatomy, medical procedures and instrumentation, and medical specialties.

41:072. Cardiac Life Support-CPR — 2 hrs.

Knowledge and skills necessary for proper performance of cardiopulmonary resuscitation. May qualify for American Heart Association certification. May be offered as: (1) Basic Rescuer's course for one (1) hour credit; (2) Instructor's course for one (1) hour credit; or (3) as a combined course for two (2) hours credit.

41:138(g). Trends and Issues in Sex Education — 2 hrs.

Current trends and issues affecting design and implementation of school and community sex education programs. Includes: curriculum development; administrative, parental, and community support; and professional preparation of sex educators. Prerequisites: 41:105 or equivalent; junior standing.

41:140. School Health Education Methods — 2 hrs.

Concepts of structure for an effective program; learning process; development of learning objectives; use of instructional aids; pupil evaluation.

41:142(g). Health Problems in the School — 2 hrs.

Awareness of student health and health problems; emphasis on prevention of health problems, class environment, communicable diseases and control and effective teacher referral within the school and to community health agencies. Prerequisite: junior standing or consent of instructor.

41:144. Curricular Materials in Health Education — 2 hrs.

The evaluation selection, and development of materials in school health as they relate to specific methods.

41:146(g). Current Issues in Health — 3 hrs.

Current health topics which are affecting individuals, communities, and the nation or world at large. Includes prevention and/or control of negative health effects of the issues covered. Prerequisite: junior standing.

41:148(g). Administration of School Health — 3 hrs.

Overview of the school health program to acquaint the student with concepts, policies, and practices of administration necessary for organization and maintenance of healthful school living, health instruction, and health services in the school and for the school and community to work together.

41:148(g). Administration of School Health — 3 hrs.

Overview of the school health program to acquaint the student with concepts, policies, and practices of administration necessary for organization and maintenance of healthful school living, health instruction, and health services in the school and for the school and community to work together.

41:153(g). Theoretical Foundations of Health Education — 2 hrs.

Selected social, behavioral, and communication theories underlying health education practice; emphasis on implications for health education. Prerequisites: 20:030 or 40:008; junior standing.

41:156(g). Changing Health Behavior — 2 hrs.

Analysis of health behavior and current theories and approaches to health-behavior change; emphasis on developing skills necessary to facilitate personal health behavior change. Prerequisite: junior standing.

41:158(g). Surveys and Inventories — 1 hr.

Use of surveys and inventories to raise awareness of health risks and assess seriousness of health risks. Prerequisite: junior standing.

41:160(g). Community and Public Health — 3 hrs.

Public health activities concerned with protection and care of the individual; focuses of factors that may be inimical to human beings. Prerequisite: 41:015.

41:162. Women's Health — 2 hrs.

A study of contemporary issues in women's health. Includes consumerism, feminism, the physician-patient relationship in the gynecological, family, and general practice settings, women's health development and maintenance, health and counseling services available for women.

41:163. Human Diseases — 3 hrs.

Systemic approach to study of human diseases emphasizing the chronic/degeneration disorders afflicting humans. Current trends in diagnosis, treatment, and preventive measures. Prerequisites: 84:031; junior standing.

41:164. Consumer Health — 2 hrs.

Issues surrounding the purchasing of health goods and services: quackery, non-traditional health care and sources of consumer protection in the health marketplace.

41:168. Field Experience in Community Health Education — 6 or 12 hrs.

Experience in area of student's career objectives. Offered on ungraded (credit/no credit) basis only. Prerequisites: senior standing and approval of Health Coordinator. Corequisite: 41:189.

41:172(g). Experience in Cardiac Rehabilitation — 2 hrs.

Laboratory aide training and experience under supervision of an exercise physiologist, physician, and a registered cardiac nurse. Lecture, 1 hr.; lab., 3 hrs.

41:175(g). Prevention and Care of Athletic Injuries — 2 hrs.

Prevention, evaluation, first aid, supportive measures, and care of athletic injuries. Nutrition; facilities; and equipment. Discussion, 1 period; lab., 2 periods. Prerequisite: 42:050.

41:176(g). Health Education Planning and Evaluation — 3 hrs.

Planning and evaluation from diagnostic approach; assessment of social, epidemiological, behavioral, educational, and administrative factors in health education programming, as well as impact and outcome evaluation. Prerequisites: 25:180; 41:153; junior standing.

41:182(g). Recognition and Evaluation of Athletic Injuries — 2 hrs.

No credit for student with credit in 37:162. Prerequisites: 42:050; 42:151; 41:175.

41:183. Remedial Exercises for Athletic Injuries — 2 hrs.

Theory and practice in developing individualized exercise programs used in injury rehabilitation. Prerequisites: 42:125 or 42:153; 41:182.

41:184(g). Modalities in Athletic Training — 2 hrs.

Physiological effects, indications and contraindications, and the physics of modalities used in injury rehabilitation. Prerequisites: 42:050; 42:151; 41:175.

41:185. Readings in Health Education — 1-4 hrs.

Credit based on student's proposal; to be determined at time of registration. Written contract will determine appropriate work load under credit guidelines. Prerequisite: approval of instructor.

41:187. Internship in Athletic Training — 1-4 hrs.

Comprehensive intern experience. May be repeated for a total of 4 hours in different areas of athletic training. Prerequisites: 42:050; 42:151; 41:175.

41:189. Seminar in Community Health Education — 3 hrs.

Complements field experience in community health education. Focus on issues in community health education and the transition from student role to health educator role. Prerequisite: senior standing; corequisite: 41:168.

41:255. Health Promotion/Risk Reduction — 3 hrs.

Survey of models for health promotion, indicators of health risk, and approaches to health in the market place.

41:285. Readings — 1-4 hrs.**41:289. Seminar.****41:290. Philosophy and Ethics of Health Education — 3 hrs.**

Analysis of philosophical and ethical issues in health education.

41:293. Epidemiology for Health Education — 3 hrs.

Principles and methods of epidemiology; application to health education programming. The distribution of disease and the search for determinants of the observed distribution.

41:295. Internship in Health Education — 2 hrs.

Health program experience with agencies other than the college or university. May be repeated once for credit. Prerequisite: consent of coordinator of health division.

41:297. Practicum — 2-3 hrs.**41:299. Research.****Physical Education****42:001. Physical Education — 1 hr.**

Work may be selected from activities as listed in the Schedule of Classes. Primarily for General Education. May be repeated.

The following six courses provide the development of fundamental skills and instructional techniques in the specified activities:

42:011. Fundamental Physical Activities — Aquatics — 1 hr.**42:012. Fundamental Physical Activities — Conditioning — 1 hr.****42:013. Fundamental Physical Activities — Dance — 1 hr.****42:014. Fundamental Physical Activities — Gymnastics — 1 hr.****42:015. Fundamental Physical Activities — Individual/Dual — 1 hr.****42:016. Fundamental Physical Activities — Team — 1 hr.****42:031. Dance Choreography — 1 hr.**

Application of art principles basic to good choreography; advanced technique and composition. Prerequisite: beginning modern dance or equivalent.

42:032. Advanced Folk Dance — 1 hr.

Basic and advanced folk dance skills and dance. Prerequisite: beginning folk dance or equivalent.

42:035. Dance for the Actor — 2 hrs.

Preparation in dance as it relates to musical productions, plays, and other art forms; designed primarily for majors and minors in theatre, music, and dance.

42:040. Participation with Students — 1 hr.

Experiences working with elementary and/or secondary school students in activities involving physical movement. Prerequisite: departmental approval. May be repeated once for credit.

42:043. Methods and Movement Experiences for Children I — 2 hrs.

Philosophy, objectives, and content of physical education for elementary school children; includes movement education, fundamental movement actions, and rhythmic activities. Exploration method emphasized. 3 periods. Prerequisite: sophomore standing. Prerequisite or corequisite: 42:013.

42:044. Methods and Movement Experiences for Children II — 2 hrs.

Exploration of growth and development; emphasis on educational gymnastics theory and progression, theory and concepts of teaching games and sports to K-6 children, and curriculum development. 3 periods. Prerequisite: 42:043. Prerequisite or corequisite: 42:014.

42:045. Physical Education for the Elementary Grades — 2 hrs.

Teaching methods and experience in activities. 3 periods. Prerequisite: sophomore standing.

42:050. Anatomy — 2 hrs.

Gross anatomy of the osseous and muscular system; joint structure.

The following thirteen courses provide for the development of a high level of performance and comprehensive understanding and knowledge pertinent to the specific activity.

42:101. Advanced Skill and Coaching Theory — Baseball — 2 hrs.**42:102. Advanced Skill and Coaching Theory — Basketball — 3 hrs.****42:103. Advanced Skill and Coaching Theory — Field Hockey — 2 hrs.****42:104. Advanced Skill and Coaching Theory — Football — 3 hrs.**

42:016 (Football) recommended to precede.

42:105. Advanced Skill and Coaching Theory — Golf — 2 hrs.**42:106. Advanced Skill and Coaching Theory — Gymnastics — 2 hrs.****42:107. Advanced Skill and Coaching Theory — Soccer — 2 hrs.****42:108. Advanced Skill and Coaching Theory — Softball — 2 hrs.****42:109. Advanced Skill and Coaching Theory — Swimming — 2 hrs.****42:110. Advanced Skill and Coaching Theory — Tennis — 2 hrs.****42:111. Advanced Skill and Coaching Theory — Track and Field — 2 hrs.****42:112. Advanced Skill and Coaching Theory — Volleyball — 2 hrs.****42:113. Advanced Skill and Coaching Theory — Wrestling — 2 hrs.****42:117. Sports Officiating — 1 hr.**

Rule interpretation and mechanics of officiating for (1) basketball, (2) field hockey, (3) football, (4) softball, (5) swimming, and (6) volleyball. Primarily for physical education majors, coaching minors, and intramural officials. May be repeated in different activities up to 5 hours.

42:118. Practicum in Coaching — 1-2 hrs.

Practical experience working with high school coaches; planning and conducting all phases of the program. May be repeated in a different sport for a total of two sports. Prerequisites: junior standing and departmental approval.

42:120. Organization and Administration of Aquatic Programs — 2 hrs.

Administration of programs, personnel, and facilities; includes pool management and maintenance.

42:122(g). Theoretical Concepts of Coaching — 2 hrs.

Introductory philosophical aspects of sport, psychological and sociological dimensions of competitive sport experiences.

42:124(g). Anatomy and Kinesiology — 2 hrs.

Attention to the skeleton, the muscular system, and to joint construction. Application to analysis of skills and techniques used in coaching. (For coaching minors.) Credit for students with credit in 42:050 and 42:151.

42:125(g). Conditioning Theory and Practice — 2 hrs.

Theory and practice in training and conditioning of athletes. 2 periods. (For coaching minors.) No credit for students with credit in 42:153.

42:127(g). Organization and Administration of Competitive Sports — 2 hrs.

The organization, administration, and management of interscholastic, inter-collegiate, and intramural sports programs.

42:129(g). Advanced Sports Theory — 2 hrs.

Advanced methods course on coaching concepts in specific sports: (1) baseball; (2) basketball; (3) field hockey; (4) football; (5) golf; (6) gymnastics; (7) soccer; (8) softball; (9) swimming; (10) tennis; (11) track and field; (12) volleyball; (13) wrestling. May be repeated for a maximum of six hours of credit. Prerequisite: department head approval for undergraduates.

42:132. Dance Curriculum — 2 hrs.

Place of dance in the school curriculum; relationships; progressions, and curriculum building.

42:134. Methods in Dance — 3 hrs.

Methods and materials in the elementary and secondary school. 4 periods.

42:135. Dance Production and Performance — 2 hrs.

Application of technical considerations, costume design, accompaniment, and program planning. Practical application of choreography and/or lecture demonstration in a dance form expected. Prerequisite: 42:013 or equivalent.

42:136. History and Philosophy of Dance — 2 hrs.

From primitive ritual to the art forms of the twentieth century.

42:145(g). Development Aspects of Movement Performance — 2 hrs.

How motor skills change with time; nature of factors effecting change; relationship of motor development to total human development; principles of motor development related to teaching motor skills.

42:151. Kinesiology — 3 hrs.

Application of principles of mechanics to body movement. Discussion, 2 periods; lab., 2 periods. Prerequisite: 42:050 or equivalent.

42:152(g). Adapted Physical Education — 3 hrs.

Recognition of postural deviations; individual and group screening techniques; exercises for specific body parts; understanding specific disabilities; and the modification of physical education activities to meet limitations found in school population. 4 periods. Prerequisite: 42:151.

42:153(g). Physiology of Exercise — 3 hrs.

Effects of exercise upon organic functions of the body. Discussion, 2 periods; lab., 2 periods.

42:157(g). Adapted Aquatics — 1 hr.

Instructor's course in teaching swimming to the handicapped person. W.S.I. prerequisite for A.R.C. certification.

42:160. Nature and Scope of Physical Education — 2 hrs.

Meaning and significance of physical education including historical, philosophical, and scientific considerations. Prerequisite: junior standing.

42:163. Methods and Materials in Secondary Physical Education — 3 hrs.

Role of the teacher in planning and teaching physical education in the secondary schools; includes instructional techniques and materials, organization and management, and a practicum experience. Discussion, 2 periods; lab., 2 periods.

42:168. Assisting in Physical Education — 1 hr.

Assisting departmental instructor in activity classes. Prerequisite: department approval. May be repeated once for credit.

42:174. Assessment Processes in Physical Education — 2 hrs.

Statistical analysis; construction of evaluative instruments; and application of written and performance tests. Prerequisite: 25:060.

42:176. Administration and Curriculum Development in Physical Education — 3 hrs.

Administration of programs in the elementary and secondary schools including budgeting, facilities, legal considerations and support services. Design, development and evaluation of curriculum content for grades K-12. Prerequisite: senior standing.

42:181. Teaching of Swimming and Aquatics — 2 hrs.

Aquatics in education and recreational programs dealing with instruction, management, and maintenance. Prerequisite: Lifesaving or approved equivalent. 3 periods.

42:185. Readings in Physical Education — 1-4 hrs.

Individual study in an area of physical education. Credit to be determined at time of registration and to be based on student's proposal. Requires approval of department head.

42:198. Independent Study.

42:251. Biomechanics — 3 hrs.

Application of mechanical principles and concepts to human movement; principally concerned with the analysis of techniques employed in sports. Credit in 37:251. Prerequisites: 42:050; 42:151; or equivalent.

42:253. Advanced Exercise Physiology — 3 hrs.

Process of scientific inquiry into exercise physiology and the identification of basic principles to be applied for maximum performance without injury. Discussion, 2 periods; lab., 2 periods.

42:255. Motor Learning — 3 hrs.

Study and application of Research findings to motor learning and the variables which influence it.

42:273. Contemporary Issues in Physical Education — 3 hrs.

Examination and analysis of continuing concerns and issues in the profession.

42:274. Measurement and Evaluation in Physical Education — 3 hrs.

Historical background of measurement in physical education; evaluation as a part of teaching; statistical techniques; construction and use of motor and knowledge tests; criteria for test selection; administering a testing program; interpretation and use of test results. Prerequisite: 25:180 or 80:172.

42:276. Supervision of Physical Education — 2 hrs.

Analysis of current supervisory practices and problems of teaching in physical education.

42:285. Readings in Physical Education — 1-4 hrs.

42:289. Physical Education Seminar — 1-3 hrs.

Special topics as indicated in the Schedule of Classes.

42:290. Research Methods in Physical Education — 3 hrs.

Introduction to processes of research in physical education, emphasis on critical analysis of literature and identification of viable research projects.

42:295. Internship in Physical Education — 2-4 hrs.

Experience in physical education programs with agencies other than in higher education. Prerequisite: consent of the graduate coordinator.

42:297. Practicum — 2-3 hrs.

Practical experience in teaching physical education at the college level.

42:299. Research.

Recreation

43:010. Introduction to Recreation — 1 hr.

Orientation to the profession, includes history, philosophy, trends, and opportunities in recreation professions.

43:020. Recreational Leadership — 2 hrs.

Theories, principles, and practices of recreational leadership; techniques and methods of working with individuals and groups. Corequisite: 43:021.

43:021. Activity Leadership Laboratory — 1 hr.

Methods and practice in leading recreational activities in social recreation, sports, games and dance. Corequisite: 43:020.

43:030. Recreation for Special Populations — 2 hrs.

Techniques of adapting recreation programs to meet the leisure needs of special populations in today's society. Corequisite: 43:031.

43:031. Fieldwork: Special Populations — 1 hr.

Observational and/or practical field experiences in recreation programs for special populations. May be taken during freshman year; must be taken on "ungraded" (credit/no credit) basis. Corequisite: 43:030. Primarily for Recreation majors.

43:040. Community Recreation — 2 hrs.

Introduction to community recreation through study of interrelationships of municipal, school, park, and agency programs.

43:041. Fieldwork: Community Recreation — 1 hr.

Observational and/practical field experience in community recreation. May be taken during freshman year; must be taken on "ungraded" (credit/no credit basis). Primarily for Recreation majors. Prerequisites: 43:020 and 43:040.

43:110. Recreation Program — 3 hrs.

Methods of planning, implementing, and evaluating recreation programs. Prerequisites: 43:020; 43:030; 43:040 (one may be corequisite).

43:112. Campus Recreation Programming — 2 hrs.

The organization, planning, and carrying out of programs in assigned, campus recreation programs. Prerequisite: 43:110.

43:114. Basic Principles of Supervision-Administration in Recreation — 3 hrs.

Principles of supervision and administration as applied to recreational settings. Prerequisites: 43:020; 43:030; 43:040 (one may be corequisite).

43:120. Administrative Practices in Community Recreation — 2 hrs.

Techniques involved in directing and administering community recreation programs. Prerequisite: 43:114.

43:123. Foundations of Therapeutic Recreation — 2 hrs.

History, philosophy, theories, professionalism of therapeutic recreation; factors influencing service delivery. Includes observation of human service clinicians. Prerequisites: 43:030; junior standing in Therapeutic Recreation.

43:140. Camp Leadership — 3 hrs.

The camping movement. Leadership techniques and laboratory experience. Discussion, 2 periods; lab., 2 periods.

43:141. Camp Counseling (Fieldwork) — 2 hrs.

Supervised counseling experience in an organized camp. Prerequisite: consent of Recreation coordinator.

43:142. Outdoor Education — 2 hrs.

The use of out-of-doors learning experiences to enhance education. Administration and program of school camping.

43:144(g). Camp Administration — 2 hrs.

Techniques of site and program development, and organization and administration of agency, private, church, school, and commercial camps which are utilized for outdoor recreational pursuits. Prerequisite: 43:140.

43:160(g). Therapeutic Recreation Programming — 2 hrs.

Methods and techniques used in therapeutic recreational services to meet the leisure needs of members of special populations. Prerequisite: 43:164. Corequisites: 43:161; 43:162; 43:163.

43:161(g). Therapeutic Recreation (Fieldwork) — 1 hr.

Laboratory course; provides supervised practical experience in an institutional setting. Corequisite: 43:160.

43:162. Assessment and Evaluation in Therapeutic Recreation — 2 hrs.

Knowledges and procedures for selection and interpretation of results of a variety of tests and assessment tools related to therapeutic recreation programming. Prerequisites: 42:124; 31:005. Corequisites: 43:160; 43:163.

43:163. Management of Therapeutic Recreation Services — 2 hrs.

Knowledges and techniques for management of therapeutic recreation including legal and financial problems, utilization of human resources, and development of public relations. Corequisites: 43:160; 43:162.

43:164(g). Physical Activities for the Handicapped — 2 hrs.

Role of physical activity for the education and recreation of the handicapped. Appropriate assessment, activity, leadership, and evaluation techniques; includes laboratory experience. Prerequisite: 43:030 or 22:150.

43:166(g). Leisure and Aging — 2 hrs.

Role of recreation and leisure in understanding and working with the older adult in community and institutional settings. Prerequisite: junior standing or consent of instructor.

43:184. Senior Project in Recreation — 1 hr.

Programming project to be completed at practicum site; written and oral presentation required during practicum semester. Corequisite: 43:187. Prerequisite: consent of coordinator.

43:185. Readings in Recreation — 1-3 hrs.

Individual study in an area of recreation. Credit to be determined at time of registration; to be based on student's proposal. Requires approval of instructor.

43:187. Practicum in Recreation — 14 hrs.

Comprehensive fieldwork experience in area of student's concentration. Prerequisite: 43:189; 300 hours certified practical experience. Corequisite: 43:184. Must be taken on ungraded (credit/no credit) basis.

43:189. Seminar in Recreation — 1 hr.

Study of professional issues; orientation to practicum. To be taken immediately prior to practicum. Prerequisites or corequisites: 43:160 or 43:112; and consent of instructor.

History

*Whitnah, Head. Cheng, Eiklor, Graves, Jones, Maier, R. Martin, Newell, *O'Connor, Prousis, Quirk, *Riley, Ryan, Sandstrom, Shepardson, A. Sunseri, R. Talbott, H. Thompson, Walker, Wohl.*

**on leave.*

Note: Students other than majors or minors in history or majors in economics, geography, political science, sociology-anthropology, or social science must take fifteen (15) semester hours each in United States history and European (world) history for approval to teach in these fields.

Note: Neither 96:070 nor 96:123 may be counted toward history majors or minors.

History Major — Teaching

Required: 68:021 or 68:022 (if both courses are not taken for General Education)	0-4 hours
Required: 90:190	3 hours
Required: 96:014; 96:015; 96:193	8 hours
Electives in history: a minimum of 22 hours (to include at least 9 hours of European history and 3 hours of non-western history)	22 hours
	<u>33-37 hours</u>

Students satisfactorily completing this major will be approved to teach in United States history or in world history; or in both, if at least 12 hours are taken in each.

The history major may consider a minor in at least one other social science discipline.

Courses used to meet the General Education requirements or requirements of other majors or minors may not be used to meet requirements of this major.

Proficiency in a foreign language and quantitative methods is strongly recommended, particularly for those planning to do graduate work.

History Major

Required: 68:021 or 68:022 (if both courses are not taken for General Education)	0-4 hours
Required: 96:014; 96:015; 96:054; 96:055; 96:193 ...	14 hours
Electives in history (to include 3 hours of non-Western history)	18 hours
Electives from at least two related fields approved by the Department of History	9 hours
	<u>41-45 hours</u>

Courses used to meet General Education or other degree requirements may not be used to meet requirements of this major.

Proficiency in a foreign language and quantitative methods is strongly recommended, particularly for those planning to do graduate work.

History Minor — Teaching

Required: 96:014; 96:015; 96:054; 96:055	12 hours
Required: 90:190 (unless already taken on major) ...	3 hours
Electives in history	9 hours
	<u>21-24 hours</u>

Students whose emphasis is American history must include one course in Latin American history. Students whose emphasis is world history must include one course in one of the following: Middle Ages, Ancient, Near East, or non-Western history.

Students satisfactorily completing this minor will be certified to teach in American history or in world history, or in both, if at least 12 hours are taken in each.

History Minor

Electives in history excluding courses used to meet general education requirements 18 hours
96:015 and 96:055 are strongly recommended.

96:014. United States History to 1877 — 3 hrs.

Events, factors, and personalities which shaped social, economic, and political development of the United States from settlement to the end of Reconstruction.

96:015. United States History since 1877 — 3 hrs.

End of Reconstruction period to the present, including economic, diplomatic, intellectual, political, and social factors.

96:054. Modern Europe to 1815 — 3 hrs.

Europe beginning with the Renaissance; development of the Reformation and the modern state (cultural, economic, and social problems of all Europe during the 16th-18th centuries.)

96:055. Modern Europe since 1815 — 3 hrs.

European history from the Congress of Vienna to the present; includes movements of national unification in Italy and Germany, and cultural movements during the "Generation of Materialism." Origins of World War I and its impact on Europe, the legacy of World War I — the Fascist and Communist revolutions; World War II, and the era of the Cold War.

96:070. Latin American Civilization — 3 hrs.

Historical, political, social, and cultural elements that form the civilization of Latin America. No credit if student has credit in 78:140. May not be taken for credit on history majors or minors.

96:101(g). History of Ancient Greece — 3 hrs.

Archeology of the Aegean and the Minoan-Mycenaean civilization; the Homeric period, the classical civilization of Greece to Alexander the Great and the Hellenistic Age; the advent of the Romans.

96:103(g). History of Ancient Rome — 3 hrs.

The Roman Republic, expansion of Roman rule, the Roman Empire, the decline and fall of the empire in the 5th century A.D. Compares the Romans as people with modern Americans.

96:107(g). War and Society in the Modern World — 3 hrs.

An historical study of the causes and conduct of war and the impact of war on society since the 17th century with emphasis on the 19th and 20th centuries.

96:116(g). Recent United States History — 3 hrs.

A history of the American people since 1945 with emphasis on domestic affairs.

96:122(g). The Black in the United States History — 3 hrs.

History of black Americans from the African background into the 1970's, with an emphasis on the period since the end of slavery.

96:123. Problems in American Civilization — 2 hrs.

Problems facing the United States in its world relationships. May not be taken for credit on history majors or minors.

96:124(g). The City in United States History — 3 hrs.

Introduction to the urban history; functions, shapes and dynamics of the city in the American experience from the 17th century to the present, emphasis on the metropolis of the past half century.

96:130(g). History of Iowa — 3 hrs.

Social, political, and economic developments in Iowa from prehistoric times to the present.

96:132(g). Internship in Historical Studies — 3-8 hrs.

Individualized study and experience in applied techniques, particularly state and local resources, includes readings, in-museum service, and a student-designed project. Recommended preceded by course in Iowa history.

96:134(g). United States Economic History — 3 hrs.

Efforts of the people to raise the standard of living, their means of livelihood, and the development of the national economy. Explores theory of economic growth.

96:136(g). American Colonial History — 3 hrs.

Seventeenth and 18th Century America; development of colonial societies in the New World and the American Revolutionary era.

96:137(g). Early National Period in U.S. History — 3 hrs.

Political, economic, and social development of the United States in the years between the American Revolution and the end of the Jacksonian Era.

96:138(g). United States Foreign Relations — 3 hrs.

Assessment of achievements and failures of United States diplomacy since 1776 and relationships of these to present and recent past.

96:139(g). Civil War and Reconstruction — 3 hrs.

Causes of the Civil War, the nature of the conflict, and the short-range and long-range consequences of the war.

96:140(g). History of the West — 3 hrs.

Westward movement of the people, from the Atlantic to the Pacific; the impact of over two centuries of frontier experience on the course of the nation's history and in the shaping of the "American" character.

96:141(g). The South in United States History — 3 hrs.

Traces the southern experience from colonization and settlement through the Civil War. Reconstruction, and the late 19th and 20th century racial and political adjustments; emphasis on post-Reconstruction period as well as the role of blacks in shaping southern society. Prerequisite: junior standing, or consent of instructor.

96:142(g). United States Constitutional History — 3 hrs.

Relates individual rights, political-socio-economic issues, and the rivalry among the Presidency-Congress-Supreme Court to the development of the U.S. Constitution.

96:143(g). Dissent in United States History — 3 hrs.

A systematic study of the dissent in general, and of specific protest movements, with emphasis on post-Civil War period, including both radical and reactionary movements — Women's rights and Women's Liberation, Old Left and New Left, Ku Klux Klan, Radical Right, Socialism and Communism.

96:144(g). History of American Thought — 3 hrs.

Historical examination of principal idea-systems which shaped the intellectual profile of American civilization.

96:145(g). Religion in America — 3 hrs.

(same as 64:117(g).)

96:146(g). History of Women in the United States — 3 hrs.

Survey of the social, cultural, and economic roles of women in the United States from founding to the present, with some comparative analysis of women's roles in other areas of the world.

96:147(g). The United States: Gilded Age to the Great Depression — 3 hrs.

United States history from the end of Reconstruction through the late 19th-century economic revolution, the Populist and Progressive reform movements, the emergence of the 20th-century internationalism, and the economic collapse of 1929. Prerequisite: junior standing or consent of instructor.

96:148(g). World War I — 2 hrs.

The origins, development, and consequences of World War I. Prerequisite: junior standing or consent of instructor.

96:149(g). United States in World War II — 3 hrs.

Stresses the U.S. diplomacy in Europe and the Far East as the war materialized, the wartime allied coalition to defeat the Axis forces, the home front, and the beginnings of the Cold War. Prerequisite: junior standing or consent of instructor.

96:151(g). The Ancient Near East — 3 hrs.

The artistic, literary, political, religious, and social accomplishments of Near Eastern people of ancient times.

96:152(g). Medieval Civilization — 3 hrs.

Social, economic, political, and cultural features seen as foundations of the modern period. From the Fall of Rome to the 15th century.

96:153(g). The Renaissance and Reformation — 3 hrs.

The intellectual, artistic, economic, and political developments of the Italian and Northern Renaissance, culminating in an examination of the 16th century Reformation.

96:156(g). History of European Popular Culture — 3 hrs.

Examines various aspects of everyday life in European history, including work, leisure, diet, housing, health, sanitation, role of women, status of children, family life, popular festivals, fashions, fads, sports, and games. Prerequisite: junior standing or consent of instructor.

96:157(g). European Diplomacy since 1870 — 3 hrs.

Modern European and global diplomacy with emphasis on the ideological factors underlying relations among the various states and the methods of the men who pursued these.

96:158(g). Age of Absolutism — 3 hrs.

History of the emerging nations of Europe with emphasis upon the age of absolutism and Louis XIV.

96:160(g). Europe since 1919 — 3 hrs.

Seeks the reasons for an age of conflict in the post World War I era; political philosophies and personalities of the period.

96:162(g). European Thought since the Enlightenment — 3 hrs.

Selected ideas and men in the 19th and 20th centuries. Prerequisite: junior standing.

96:164(g). English History to 1688 — 3 hrs.

England and the British Isles: Celtic and Roman times, England in the Middle Ages, the Tudor-Stuart dynasties, the Glorious Revolution of 1688; England's beginnings as a great power and her relations with the rest of Europe.

96:165(g). English History since 1688 — 3 hrs.

English political, economic, social, and intellectual history with emphasis on the Victorians and the 20th century; the British Empire and Commonwealth.

96:168(g). European Imperialism — 3 hrs.

Motivations, institutions, and policies of European expansion in Asia, Africa, and Latin America.

96:169(g). History of Imperial Russia — 3 hrs.

Political, social, economic, and cultural aspects of Russia with emphasis on the 19th century.

96:170(g). History of Soviet Russia — 3 hrs.

Political, social, economic, and cultural developments of Russia in the 20th century, emphasis on ideology.

96:171(g). History of Germany to 1870 — 3 hrs.

Social, political, and intellectual history of Germany with emphasis on 16th, 17th, and 18th centuries; 19th century to 1871.

96:172(g). History of Germany since 1871 — 3 hrs.

Political, social, economic, and cultural developments of Germany within the 19th and 20th centuries; emphasis on the Nazi period.

96:174(g). History of France — 3 hrs.

Surveys of cultural, political, economic and political history of France with emphasis on the period 1760 to the present.

96:175(g). Modern African History — 3 hrs.

Survey of 19th and 20th-century sub-Saharan Africa including economic and social development, the emergence of modern nationalist movements, and the character of the European contact and its interaction with traditional African politics. Prerequisite: junior standing or consent of instructor.

96:176(g). Colonial Latin American History — 3 hrs.

Discovery, exploration, conquest and development of Colonial Latin America.

96:177(g). History of Mexico and the Caribbean Area — 3 hrs.

Mexico and the major Caribbean countries, the United States in the Caribbean, with emphasis on the 20th century.

96:178(g). Modern Middle East History — 3 hrs.

Examines Middle East history from 1789 to the present including Islamic roots, the rise of nationalism in various states, Arab attempts at unity, and the Arab-Israeli conflict. Prerequisite: junior standing or consent of instructor.

96:180(g). Latin American History — 3 hrs.

Modern development of the Latin American States and their relations to the United States.

96:181(g). Pre-Modern South Asia — 3 hrs.

The culture and institutions within the Indian subcontinent from antiquity through the Hindu and Islamic periods.

96:182(g). Modern South Asia — 3 hrs.

The influence of the West upon the cultures and institutions within the Indian sub-continent; response to changing conditions in the Anglo-Indian Empire; rise of movements leading to the establishment of India and Pakistan.

96:183(g). Pre-Modern Chinese History — 3 hrs.

Cultural and institutional developments in China from earliest times to ca. 1800 A.D.

96:184(g). East Asia to 1850 — 3 hrs.

Religion, philosophy, literature and the arts of East Asia.

96:185(g). East Asia since 1850 — 3 hrs.

History of China, Japan, and Korea in modern times.

96:187(g). Modern Chinese History — 3 hrs.

Political, social, economic, and intellectual developments in China with special emphasis on the period from the Revolution of 1911 to the present.

96:188(g). South Asian Intellectual History — 3 hrs.

Intellectual developments in the Indian subcontinent.

96:189. Readings in History — 1-3 hrs.

Student will choose one of the following areas at registration: (1) Ancient; (2) Medieval; (3) English; (4) French; (5) German; (6) Russian; (7) United States; (8) Latin American; or (9) Asian (India, China, Japan). Prerequisite: approval of head of department; for the field of U.S. history, 9 semester hours in U.S. history; for each of the other fields, 9 hours in history other than U.S., which must include 3 hours related to the particular field to be studied.

96:192. Junior-Senior Seminar — 1-3 hrs.

Seminar in history offered as indicated in Schedule of Classes. For history majors only. May be repeated for credit in different fields. Prerequisite: junior standing; must have 9 semester hours in history including 3 hours in field of the seminar.

96:193(g). Historians and Philosophy of History — 2 hrs.

A study of the methodology and philosophy of history, illustrated by the history of historical writing. Prerequisite: junior standing.

96:198. Independent Study.

96:238. United States Diplomacy — 3 hrs.

Combines the lecture and readings-seminar approach in studying concepts and policies involved in the nation's diplomacy since the late nineteenth century.

96:280. Seminar in History — 1-3 hrs.

Offered in specially designed areas as indicated in Schedule of Classes.

96:285. Individual Readings — 1-3 hrs.

May be repeated. Prerequisite: approval of department head.

96:289. Seminar in United States Historiography — 3 hrs.

Seminar on major schools of interpretation of the American past, and a specific examination of the historiographical development of selected topics in American history.

96:289. Seminar in European Historiography — 3 hrs.

Readings and research seminar on the development of the Western tradition of critical historical scholarship and on the literature of selected topics, controversies, and problems of modern European history.

96:290. Historical Methods — 3 hrs.

Investigation into the problems confronting the historian and an analysis of the methods and techniques employed by the historian.

96:292. Historical Analysis — 3 hrs.

Logical, methodological, philosophical, and theoretic problems of historical inquiry, emphasis on developing criteria for the critical evaluation of historical scholarship.

96:299. Research.

Home Economics

Franken, Head. L. Beykirch, P. Conklin, Durant, MacKinnon, Megivern, J. Morgan, K. Morgan, B. Pershing, K. Roberts, Spaide, Story, Wells, Widmer.

The University of Northern Iowa's home economics unit is accredited by the Council for Professional Development of the American Home Economics Association.

Vocational Home Economics Major — Teaching

Required: 31:010; 31:018; 31:035; 31:037; 31:038; 31:060; 31:062; 31:065; 31:070; 31:110; 31:150; 31:152; 31:177; 31:181; 31:182; 31:190; 31:193 ..	45 hours
Required: 31:172 or 31:178 (Sec. 4)	2-3 hours
Required: 86:061; 86:063; 84:033	11 hours
Electives: 100-level home economics courses	3 hours
	61-62 hours

Also required: 400 hours of student-initiated and department-approved work experience in home economics occupations to meet State Vocational certification requirements.

In order to receive departmental approval for student teaching, a student on this program must satisfy both the university requirements for student teaching and the following specific departmental requirements:

1. Successful completion of 31:190;
2. No grade less than C in any departmental course applied to this program, unless the student has a grade-point average of 2.5 or above in all departmental courses to be applied to this program.

No minor is required.

Vocational Home Economics Teaching majors may get DPI Endorsement #53 for Pre-Kindergarten/Kindergarten teaching by completing an additional 31 hours (see Early Childhood Education Major).

Home Economics Major — Teaching

Required: 31:010; 31:018; 31:030; 31:035; 31:038; 31:060; 31:062; 31:065; 31:070; 31:110; 31:150; 31:152; 31:177; 31:190; 31:193	40 hours
Required: physical, chemical, or biological science in addition to general education (may include 42:050) ..	6 hours
	46 hours

In order to receive departmental approval to student teach, a student on this program must satisfy both the university requirements for student teaching and the following specific departmental requirements:

1. Successful completion of 31:190;
2. No grade less than C in any departmental course applied to this program, unless the student has a grade point average of 2.50 or above in all departmental courses to be applied to this program.

A minor (minimum of 15 hours) is required.

Home Economics in Business — Clothing and Textiles Major

Required: 31:010; 31:015; 31:018; 31:030; 31:060; 31:070; 31:110; 31:152; 31:193 31:195	24 hours
Required: one of two options for a total of	28 hours
	52 hours

Fashion Merchandising Option

Required: 31:020; 31:115	5 hours
Electives: 31:111; 31:112; 31:113; 31:114; 31:116; 31:119; 31:184; 31:199 (Fashion Study Tour)	11 hours
Required: 13:152 and 9 hours from 13:140; 13:141; 13:143; 13:147; 17:040 or 13:153; 12:030; 15:153 ...	12 hours
	28 hours

Recommend: 15:080 or 81:025; 92:024; 98:058.

Fashion Promotion Option

Required: 31:020; 31:115	5 hours
Electives: 31:111; 31:112; 31:114; 31:116; 31:117; 31:119; 31:184; 31:199 (Fashion Study Tour)	8 hours
Required: 50:026; 50:077; 66:040 and 6 hours from 66:102 or 50:183; 66:140 or 50:163; 66:141 or 24:131; 66:104; 13:152; 13:140; 66:110*	15 hours
	28 hours

(*Field Experience might be substituted for Preprofessional experience.)

Home Economics — Design and Human Environment Major

Required: 31:030; 31:070; 31:110; 31:152; 31:164; 31:061; 31:063; 31:064; 31:066; 31:067; 31:068; 31:125; 31:126; 31:127; 31:193; 31:195	48 hours
Required: one of the following three emphases a total of ..	12 hours
	60 hours

Emphases —

Art (required):

60:026; 60:041	6 hours
6 hours from 60:063; 60:018; 60:025; 60:027; 60:032; 60:080	6 hours

Note: The art prerequisite for one or more of the above courses is 60:001, which can be taken as a General Education requirement in the Artistic Processes area.)

Behavioral Sciences (required):

40:008; 98:136	6 hours
6 hours from 31:055; 40:175; 97:010; 97:130; 98:080; 98:110	6 hours

Note: The sociology prerequisite for one or more of the above sociology courses is 98:058, which can be taken as a General Education requirement in the Societies area.

Business (required):

13:152; 15:080	6 hours
6 hours from 12:030; 13:140; 13:141; 15:153; 17:040 ...	6 hours

Students electing this major should declare one of these emphases in the second semester of the sophomore year.

Home Economics in Business — Foods and Nutrition Major

Required: 31:035; 31:037; 31:038; 31:060; 31:062; 31:070; 31:130 or 31:137; 31:142; 31:144; 31:145; 31:152; 31:193; 31:195	39 hours
Required: 84:033; 86:061; 86:063	11 hours
Required: one of the following two emphases for a total of ..	15 hours
	65 hours

Emphases:

Foods and Nutrition — Business

Required: 31:146; 31:147	6 hours
Required: 13:152; 15:080	6 hours
3 hours from 12:030, 13:140, 15:153	3 hours
	15 hours

Foods and Nutrition — Business Communications

Required: 15:153; 18:113; 18:114; 50:138; 50:163	15 hours
--	----------

It is recommended that students take the two additional courses required to complete a Business Communications Minor. (See page 57.)

Home Economics — Dietetics Major

Required: 31:035; 31:037; 31:038; 31:060; 31:070; 31:130; 31:137; 31:142; 31:144; 31:145; 31:147; 31:149; 31:152; 31:193	43 hours
Required: 84:033; 84:138; 86:048; 86:050	15 hours
Required: 15:153; 20:139	6 hours
	64 hours

Planning for this major should begin in the freshman year. To meet the academic requirements of the American Dietetic Association Plan IV for post-graduate internships, students must carefully plan their programs to include courses from psychology, sociology, anthropology, statistics, computer science, economics, business administration, and natural sciences.

Home Economics — Family Services Major

Required: 31:010; 31:030; 31:055; 31:057; 31:060; 31:065; 31:070; 31:152; 31:154; 31:155; 31:177; 31:193; 31:195	38 hours
Electives: 100-level department-approved courses in areas such as gerontology, family life education, human relationships, or adult education	12 hours
	50 hours

Home Economics Minor

Required: 31:010; 31:030; 31:060; 31:070; 31:152	13 hours
Electives in home economics	6 hours
	19 hours

Family Life Education Minor

Required: 31:051; 31:055; 31:070; 31:152; 31:155; 31:157	17 hours
Required: 31:150 or 31:153	3 hours
	20* hours

*Other courses approved by the adviser must be substituted to make a total of at least 15 semester hours if courses listed are already counted on the student's major.

This minor does not qualify one for teaching home economics.

Home Economics Subject Field — Middle School/Junior High Education Major*

Required: 31:010; 31:015; 31:030; 31:039; 31:060; 31:065; 31:070; 31:152; 31:190; 31:193	25 hours
---	----------

(*See Department of Curriculum and Instruction, page 68.)

31:010. Clothing Selection — 2 hrs.

Problems in clothing decisions.

31:015. Clothing Construction I — 2 hrs.

Clothing construction using commercial patterns. No credit toward a major in home economics.

31:018. Clothing Construction II — 3 hrs.

Garment construction using advanced commercial patterns and construction techniques. Prerequisites: 31:010; 31:015 or successful completion of Credit by Examination.

31:020. Introduction to Fashion Merchandising — 2 hrs.

Evaluation, selection, coordination, and promotion of fashion merchandise.

31:030. Basic Nutrition — 2 hrs.

No credit for 31:030 if credit previously earned in 31:037. Food nutrients essential for good health; emphasis on selection and use of food for health and satisfaction of the individual and the family.

31:035. Foods — 3 hrs.

Basic principles of food selection, preparation, and service. For majors in Foods and Nutrition in Business and in Vocational Home Economics — Teaching. Prerequisite or corequisite: 86:063.

31:037. Principles of Nutrition — 3 hrs.

Relation of foods and nutrition to growth, development, and maintenance of health. A study of development of good nutritional habits for children and adults. Prerequisite: 86:063 or equivalent; prerequisite or corequisite: 31:035.

31:038. Meal Management — 3 hrs.

Problems involved in the planning, selection, preparation, and serving of meals. Emphasis on management of time, energy, and money. Prerequisites: 31:030 or 31:037; 31:035 or consent of instructor.

31:039. Food for the Family — 3 hrs.

Selection, preparation, and service of food; utilization of nutrition in menu planning. No credit for major in Vocational Home Economics.

31:040. Nutrition and Dental Health — 4 hrs.

The need for and functions of nutrients in the body. Emphasis on the effect of foods and nutrients in oral health and disease. Limited to students in dental hygiene program. Prerequisites: 86:061; 86:063; or equivalent.

31:051. Personal Relationships — 2 hrs.

Facilitating personal growth and satisfying interpersonal relationships, using group process to increase awareness and acceptance of self and others.

31:055. Human Growth and Development — 3 hrs.

Psychological, cognitive, social, and physiological factors affecting the human developmental pattern from conception through old age. Prerequisite: 40:008 or consent of instructor.

31:057. Human Relationships and Sexuality — 3 hrs.

Male and female identity; establishment of meaningful interpersonal relationships, and definition and role of human sexuality in human relationships.

31:060. Related Design — 3 hrs.

Introduction to design, analysis of the visual environment, elements and principles of design. Does not count for credit in design major.

31:061. Introduction to Design and Human Environment — 2 hrs.

Context of "design and human environment"; develops individual perception of the complexity of design. Introduction and interpretation of relationship of the design emphasis options to processes of design.

31:062. Household Equipment — 3 hrs.

Selection, use, and care of home appliances. Application of basic physical science principles.

31:063. Drawing I — 3 hrs.

Introductory drafting course; emphasis on drawing as a visual communications medium. Develops basic technical drafting skills as a graphic language for beginning designers. Prerequisite or corequisite: 31:061.

31:064. Drawing II — 3 hrs.

Drawing as a practical design language; development of simple, fast, and accurate method of drawing; and humanize drawing as a design skill. Includes lab experiences. Prerequisite: 31:063.

31:065. Housing and Home Furnishings — 3 hrs.

Practical, social and aesthetic aspects of choosing and furnishing a living space. Does not count for credit on design major. Prerequisite: 31:060.

31:066. Design I — 4 hrs.

Design elements applied to two- and three-dimensional space. Explores problem solving by use and interrelationships of form, function, technique, materials, and tools. Development of vocabulary for work and criticism, and for disciplines of professional design practice. Prerequisite or corequisite: 31:063.

31:067. History of Interiors I — 3 hrs.

Styles of furnishings, interiors, and architecture from antiquity to the mid-19th century.

31:068. History of Interiors II — 3 hrs.

Styles of furnishings, interiors, and architecture from the mid-19th century to the present and their use in homes; current trends and designers. Prerequisite: 31:067.

31:070. Management of Family Resources — 3 hrs.

Management of human, economic, and environmental resources available to individuals and families throughout the family life cycle with emphasis on material resources; application of management processes to goal achievement. Prerequisite: at least sophomore standing.

31:109(g). Custom Dressmaking — 3 hrs.

Techniques of custom dressmaking; customer relations, management of time, energy and finances in a service-oriented business. Prerequisite: 31:018; junior standing; or consent of instructor.

31:110. Textiles — 3 hrs.

Effect on fiber content, construction, and finish on the serviceability and cost of fabrics. Identification tests. Recommended 86:063 be taken prior to 31:110.

31:111(g). Costume Design-Flat Pattern — 3 hrs.

Flat pattern making. Prerequisite: 31:018.

31:112(g). Tailoring — 3 hrs.

Tailoring of suits and coats. Prerequisite: 31:018; recommended to precede: 31:111.

31:113. Decorative Textiles — 3 hrs.

Textile printing, weaving, dyeing, and other decorative processes. Prerequisite: 31:060.

31:114(g). Socio-Psychological Aspects of Textiles and Clothing — 3 hrs.

Origins and functions of clothing and textiles for the individual and society. Hypotheses concerning clothing among cultures and implications for clothing consumption patterns for individuals and families from personal value system. Recommended to precede this course: 98:058 or 40:008 or equivalent.

31:115(g). Fashion Retailing Concepts — 3 hrs.

Current theories of clothing consumption factors affecting family clothing expenditures; production and distribution of textile and clothing products for the consumer market. Principles of merchandising as applied to clothing and household textiles. Prerequisite: 31:020.

31:116(g). History of Costume — 3 hrs.

Costume in the western world from ancient times to 21st century.

31:117(g). Costume Design-Draping — 3 hrs.

Principles of designing with cloth on mannequins. Prerequisites: 31:111.

31:118(g). Problems in Textiles and Clothing — 1-4 hrs.

(1) Textiles, (2) Clothing.

31:119(g). Trends in Textile and Apparel Technology — 3 hrs.

Survey of research, development, and distribution of textile products in relation to consumer needs. Prerequisite: 31:110.

31:120(g). Demonstration Techniques — 2 hrs.

Techniques of demonstration and their application in learning and teaching. Demonstrations planned and presented to audiences of varied size, background, and interest.

31:125. Design II — 4 hrs.

Human determinates as introduction to the organization of human perception of physical and psychological needs in personal space. Prerequisite: 31:066.

31:126. Design III — 4 hrs.

Human determinates of design of spaces which solve specific human problems; analysis of the complexities of social functions. Prerequisite: 31:125.

31:127. Design IV — 4 hrs.

Development of systematic approach to solving complex human needs in the public zone. Analysis of user needs in the public environment. Design studies where users and their environment require equal functional priority. Prerequisite: 31:126.

31:130(g). Nutrition During the Life Cycle — 3 hrs.

Human nutritional needs; nutrient requirements of women during the reproductive period; problems in feeding infants and children; indices of growth and development; and geriatric nutritional problems. Prerequisite: 31:037.

31:137(g). Advanced Nutrition — 3 hrs.

Nutritive value of food — its relation to chemistry and the physiological aspects of digestion and metabolism. Dietary planning and analysis for normal and abnormal nutrition. Discussion, 2 hrs.; lab., 2 hrs. Prerequisites: 31:038; 86:063.

31:142(g). Experimental Foods — 3 hrs.

Functions of ingredients, factors affecting quality of food products, experimental projects under controlled conditions; and technical writing. Prerequisites: 86:061; 86:063.

31:143(g). Origin of Foods — 3 hrs.

Influence of food on cultural and social relationships of family, community and world. Racial and national food patterns.

31:144(g). Comparative Study of Foods — 3 hrs.

Food preservation, factors affecting palatability and nutritive value of food, sensory evaluations and preference surveys as related to the food industry. Prerequisite or corequisite: 84:033; prerequisite: 31:038.

31:145(g). Quantity Food Production and Purchasing — 4 hrs.

Study of various aspects of and laboratory experience in quantity food production and purchasing. Prerequisites: 31:038; and junior standing.

31:146(g). Food Analysis — 3 hrs.

Basic analysis; explanation and performance of methods commonly employed in food testing laboratories; areas include chemical, microbiological, physical, and purity analysis. Prerequisites: 31:035; 84:033; 86:063.

31:147. Food Microbiology — 3 hrs.

Microbiological examination of foods, food-borne illnesses, microbial standards and specifications, food preservation, and sanitation. Prerequisites: 84:033; 86:063.

31:148(g). Problems in Foods and Nutrition — 1-4 hrs.

(1) Foods; (2) Nutrition.

31:149. Nutrition in Disease — 5 hrs.

The role of nutrition in the prevention and treatment of disease. The pathology of selected diseases and the biological basis of nutritional, medical, and drug therapy. Prerequisites: 86:050, 84:138, 31:130 or 31:137.

31:150(g). Child and the Home — 3 hrs.

The infant through pre-school age; experience with children through a play-school situation. Prerequisite: 20:014 or 20:030 or 31:055.

31:152(g). Family Relationships — 3 hrs.

Understanding self as an individual and family member; using group process to explore relationships and communications within family groups throughout the life cycle.

31:153(g). Family Relationships in Crisis — 3 hrs.

Family dynamics in crisis situations; effects of stress and crises on individual and families; intervention techniques used to support family members facing crises (e.g., divorce, unplanned pregnancy, child abuse, physical or mental disability, job loss, and death). Prerequisite: 31:152 or consent of instructor.

31:154(g). Family Perspectives in Adulthood and Aging — 3 hrs.

Theories and developmental patterns in early, middle, and late adulthood. Family interaction patterns in adulthood from biological, social, and emotional perspectives. Prerequisites: 31:055 or 20:030; or equivalent; junior standing.

31:155(g). Parenting — 3 hrs.

Roles and relationships involved in parenting; practical aspects of child rearing based on developmental stages, emphasizing the development of self with love, trust, identity, autonomy, and responsibility.

31:157(g). Family Life Education — 3 hrs.

Exploration of issues, materials, and methods in family life education; development of concepts and curricula for various age and special needs groups; qualifications of the family life educator. Prerequisites: 31:057 or 31:152; junior standing.

31:158(g). Problems in Relationships and Human Development — 1-4 hrs.

Sec. 1. Personal and Family Relationships.
Sec. 2. Human Development.
Sec. 3. Human Sexuality.

31:163(g). Contemporary Housing Problems — 3 hrs.

Analysis of current U.S.A. housing needs, urban and rural housing problems, roles of private citizens, business and government, and remedial measures. Exploration of housing solutions and trends in other countries. Field trips and individual studies. Prerequisite: 31:065 (may be waived for non majors).

31:164. Professional Practice of Interior Design — 2 hrs.

Survey of field opportunities; future professional role, business ethics and responsibilities of the designer, client-designer and trade relationships. Prerequisite or corequisite: 31:127.

31:168(g). Problems in Housing and Interior Design — 1-4 hrs.

Sec. 1. Housing.
Sec. 2. Interior Design.
Sec. 3. Household Equipment.

31:172. Home Management House — 3 hrs.

Experience in applying the principles of management to family resources. Residence in the house integrates the understandings, knowledge, and skills gained from the various phases of home economics. To be taken during professional semester opposite student teaching. Prerequisites: 31:038; 31:070.

31:175(g). Consumer Issues — 2 hrs.

Explores current consumer issues having impact on the quality of life; emphasis on consumer in relation to government, business and industry, and environmental issues. Prerequisite: 31:177 or consent of instructor.

31:177(g). The American Consumer — 2 hrs.

Analytical approach to the consumption of goods and services. Understanding the consumer movement; developing competencies for consumer decisions and actions.

31:178(g). Problems in Home Management — 1-4 hrs.

Experience in applying the principles of management to family resources. (1) Family economics; (2) consumer; (3) home management; (4) home management laboratory experience. Section 4 open only to students currently responsible for the management of their own homes — 2 hrs. credit; supervised experience in applying the principles of management to family resources to attain family goals. Prerequisites: 31:038; 31:070; and consent of instructor.

31:181(g). Organizations and Administration of Vocational Home Economics Programs — 2 hrs.

History, philosophy, and current status of vocational home economics. Includes program development and coordination of home economics-related occupations and career education in home economics.

31:182(g). Adult Education — 2 hrs.

Survey of scope and need for adult education. Materials and techniques suited to group work with adults. Observation and participation in organizing and teaching an adult class. Prerequisite or corequisite: 31:190.

31:184(g). Topics — 1-3 hrs.

Selected topics relating to current issues in home economics. Topics to be announced in the Schedule of Classes. May be repeated for maximum of 4 hours but not in the same topic. Prerequisite: junior standing or consent of instructor.

31:188(g). Problems in Education — 1-4 hrs.

(1) Home Economics Education; (2) Curriculum Planning.

31:190. Methods in Home Economics — 3 hrs.

Roles of home economics teacher. Planning and evaluating the teaching of home economics including microteaching experience. Prerequisites: Levels I and II of the Common Professional Sequence and at least 25 credit hours of required departmental courses.

31:193. Home Economics as a Profession — 1 hr.

History, philosophy, professional ethics and organizations, and relationships of the home economics profession; discussion of roles and opportunities for the new professional in home economics. Prerequisite: senior standing or consent of instructor.

31:195. Pre-Professional Experience.

Supervised experience in approved work situation. Transfer students must complete one full semester in residence before being approved for pre-professional experience.

Sec. 1. Clothing and Textiles — 4 hrs.

Sec. 2. Foods and Nutrition — 4 hrs.

Sec. 3. Design and Human Environment — 4 hrs., prerequisite: 31:164.

Sec. 4. Family Services — 4 hrs.

31:198. Independent Study.

31:199. Fashion Study Tour — 2-3 hrs.

31:250. Family Life and Human Sexuality — 3 hrs.

Explores human sexuality over the life cycle and its relation to family life; includes current literature, films, and research findings. Relevant for family life and sex education in home and school. Prerequisite: 31:152 or equivalent; highly recommended to be preceded by 31:051, 31:055, 98:105.

31:251. Human Ecology Through the Family Life Cycle — 3 hrs.

Broad view of human development from infancy to old age; emphasis on interrelationships between individual, family, and society. Prerequisite: 31:152 or equivalent. Strongly recommended: 31:051; 31:055 or equivalent.

31:252. Human Development Through the Life Span — 3 hrs.

Principal conceptual frameworks in human development. Includes review of theories of child and adolescent development, and in-depth look at adult and family interactions and stages of maturity and old age. (Same as 40:252.)

31:280. Methods and Curriculum in Home Economics — 3 hrs.

Clarification and use of a rationale in curriculum development in home economics. Special problems in application.

31:281. Research in Home Economics — 3 hrs.

Evaluation of current research in home economics and development of research proposals.

31:282. Supervision in Home Economics — 2 hrs.

Objectives, techniques, and organization of supervised teaching in teaching-training and in city and area schools.

31:283. Techniques of Evaluation — 2 hrs.

Construction and use of different types of instruments for evaluating educational outcomes. Guided study of the available measuring instruments in home economics.

31:284. Current Issues and Trends in Home Economics — 3 hrs.

Examination of issues faced by home economists and current trends in the field.

31:285. Reading in Home Economics — 1-6 hrs.

Readings in various areas according to student needs.

31:288. Problems in Home Economics — 1-4 hrs.

Various areas according to students' needs. 1. Home Economics Education; 2. Human Development and Family Life; 3. Foods and Nutrition; 4. Clothing and Textiles; 5. Design and Human Environment; 6. Management and Consumer Education.

31:289. Seminar in Home Economics — 1-3 hrs.

May be repeated for up to 9 hours of credit. Credit and topic to be given in Schedule of Classes.

31:290. Practicum — 2-3 hrs.

(Non-teaching.) Experience in various areas according to student needs. May be repeated for up to 8 hours of credit.

31:299. Research.

Industrial Technology

Fecik, Head. Arafa, Betts, Bro, Dennis, Fahmy, A. Freitag, C. Johnson, LaRue, Lovata, L. Miller, P. Miller, R. Pershing, Petty, Pine, Stulken, Tolu Honary, White.

Bachelor of Arts Program

Industrial Arts Education Major

Required *mathematics-science: 80:040; 86:020; 88:052	12 hours
Required: 33:011; 33:016; 33:018; 33:019; 33:020; 33:022; 33:032; 33:036; 33:190; 33:195	31 hours
Electives in Industrial Technology	12 hours
	55 hours

*Special sections of 80:040 for this major.

88:052 is not required for students completing 88:054 and 88:056.

Students intending to teach industrial arts at the senior high school level should complete not less than twelve (12) hours of electives in one of the following areas: Construction, Manufacturing, Power and Energy, Communications.

Industry Major

Required: 33:005; 33:011; 33:016; 33:018; 33:020; 33:022; 33:032; 33:036; 33:172; 33:187; 15:153	34 hours
Required *mathematics-science: 80:040; 86:020; 88:052	12 hours
**Electives in Industrial Technology	12 hours
	58 hours

*Special sections of 80:040 for this major. 88:052 is not required for students completing 88:054 and 88:056.

**Students should complete electives (12 hours) in one of the following concentrations: Power and Energy, Mechanical Design and Drafting, Manufacturing, or Graphic Arts.

Industrial Arts Education Minor

Required: 33:005; 33:011; 33:016; 33:018; 33:020; 33:022; 33:032; 33:036; 33:190	29 hours
---	----------

Industry Minor

Required: 33:005; 33:020; 33:032	6 hours
Electives in Industrial Technology	14 hours
	20 hours

Industrial Arts Subject Field — Middle School/ Junior High School Education Major*

Required: 33:005; 33:011; 33:020; 33:022; 33:032; 33:036; 33:190; and two of the following: 33:016, 33:018, 33:183	29 hours
--	----------

(*See Department of Curriculum and Instruction, page 68.)

Bachelor of Technology Programs

Construction Technology Major

Required General Education	40 hours
Required mathematics: 80:040; 80:046	8 hours
Required physical sciences: 86:020; 88:054; 88:056 ..	12 hours
Technical requirements: 33:005; 33:011; 33:018; 33:020; 33:032; 33:115; 33:116; 33:136; 33:137; 33:166; 33:167; 33:170; 33:179	38 hours
Management requirements: 12:030; 15:153; 33:149; 33:173; 33:187; 33:196; 81:070	20 hours
Electives	12 hours
	130 hours

Industrial Technology Major

Required: General Education	40 hours
Required mathematics-science: 80:040; 80:048; 86:044; 86:048; 88:054; 88:056	24 hours
Required core: 33:005; 33:020; 33:032; 33:187; 15:153	12 hours
Required: one of the Concentrations listed below ...	44 hours
Electives	7 hours
	127 hours

Concentrations:

<i>Mechanical Design and Drafting Technology:</i> 33:011; 33:012; 33:022; 33:111; 33:112; 33:113; 33:117; 33:118; 33:132; 33:148; 33:162; 33:170; 33:172 ...	44 hours
<i>Manufacturing Technology:</i> 33:011; 33:016; 33:111; 33:112; 33:113; 33:132; 33:141; 33:143; 33:144; 33:148; 33:162; 33:170	44 hours

Power and Energy Technology Major

Required: General Education	40 hours
Required mathematics and science: 80:048 or 80:060 and 80:061; 86:020; 88:054; 88:056; 81:070	19-23 hours
Required management: 12:030; 13:152; 15:070; 33:143; 33:144; 33:187	16 hours
Required technical core: 33:005; 33:020; 33:032; 33:036; 33:038; 33:126; 33:129; 33:152; 33:156; 33:157; 33:162; 33:174; 33:176	39 hours
Electives	12-16 hours
	130 hours

Vocational Technical Education Major

Required: General Education	40 hours
Required mathematics-science: 80:040; 80:046; 86:020; 88:054; 88:056	20 hours
Required professional: 20:017; 20:018; 20:030; 20:040; 28:139; 33:101; 33:181; 33:191; 33:193 ...	24 hours
Required: 33:171 and concentration	36 hours
University electives	10 hours
	130 hours

Concentrations:

A concentration with department approval of at least 36 semester hours to include 33:171 Technical Work Experience, and one of the following concentrations: Construction Technology, Graphic Arts Technology, Manufacturing Technology, Mechanical Design/Drafting Technology, Power and Energy Technology, or a technical concentration of 33:171 Technical Work Experience, plus a competency

examination in a technical emphasis in an industrial, trade, or technical area. The concentration is a means for the candidate to demonstrate occupational competence in an industrial, trade, or technical field by performance and written examination and to validate work experience in an industrial trade, or technical field approved by the department for quality, recency and relevance.

33:005. Production Systems — 2 hrs.

Introduction to construction and manufacturing technology. Evolution, systems, research and development, and planning and control of production. Evaluation of industrial consumer products.

33:011. Material Processing Technology — 6 hrs.

Laboratory activities in measuring, forming, separating, combining, conditioning, and finishing processes. Prerequisite or corequisite: 33:005.

33:012. Engineering Graphics — 2 hrs.

Orthographic projection, auxiliary views, and rotation methods of solving geometric problems (e.g., true length, bearing and slope lines; true size, strike and dip of planes; connectors; piercing points; and line of intersection of planes).

33:016. Manufacturing Technology — 2 hrs.

Production systems necessary to design, plan for mass production, and produce finished goods. Prerequisite: 33:011 or consent of instructor.

33:018. Introduction to Construction Technology — 1-2 hrs.

Management, personnel, and production practices of the construction industry. Lab includes topographic mapping, surveying, concrete, masonry, and wood-frame building construction. Discussion, 1 period; lab., 2 periods; lab. not required for Construction Technology majors. Prerequisite for lab. sections: 33:011 or consent of instructor.

33:019. Introduction to Industrial Arts Education — 2 hrs.

Introduction to the industrial arts education teaching environment, requirements, responsibilities and professional literature and organizations. Includes historical background, contemporary approaches, trends and the role of industrial arts in the total school curriculum, and exploration of personal goals.

33:020. Communication Systems — 2 hrs.

Industrial communications, emphasis on visual and audio systems. Concepts of design, production, and dissemination methods; factors involved in design and distribution of industrial consumer products.

33:022. Communications Technology — 5 hrs.

Synthesis of industrial communications through product development, distribution, and service: includes product and packaging design, and development of promotional materials via visual and audio communications. Prerequisite or corequisite: 33:020.

33:032. Power Systems — 2 hrs.

Broad areas of energy and power; emphasis on technology involved in power transmission, generation, control, storage, and consumption. Energy utilization by society and the impact on the economy and environment.

33:036. Power Technology — 5 hrs.

Basic applications of specific principles of energy and power systems. Demonstrations of instrumentation, procedures analysis and reporting. Prerequisite or corequisite: 33:032.

33:038. Industrial Electricity — 4 hrs.

Study of AC concepts as associated with motors, generators, transformers, control devices, and electrical distribution systems. Prerequisite: 33:036 or consent of instructor.

33:101(g). History and Philosophy of Vocational-Technical Education — 2 hrs.

Philosophy and historical development, principles, practices, and organization of public vocational-technical and adult education in the nation.

33:105(g). Guides to Automotive Fundamentals — 2 hrs.

Automotive principles and first echelon maintenance of the automobile. No credit for a student having credit in 33:036.

33:111. Technical Drafting — 4 hrs.

Detail and assembly drawings, sections; auxiliary views; development; dimensioning and tolerancing; gears and cams.

33:112(g). Product Design and Drafting — 3 hrs.

Application of principles and processes of design and drafting to the research and development of manufacturing products. Prerequisites: 33:011; 33:111; 33:170 or 33:172; or consent of instructor.

33:113(g). Tool Design and Drafting — 4 hrs.

Application of contemporary drafting practices used in manufacturing industries; includes specification of quality controls, product analysis and revision procedures, basic computer graphics, and tool design. Prerequisites: 33:011; 33:111; 33:170 or 33:172; or consent of instructor.

33:115(g). Residential Planning and Drawing — 4 hrs.

Design and development of working drawings for a residential structure. Prerequisite: 33:166 and junior standing, or consent of instructor.

33:116(g). Architectural Plans and Specifications — 3 hrs.

Analysis and interpretation of contract documents for construction. Emphasis on analyzing working drawings and specifications for construction details, structural and mechanical systems, and compliance with building codes. Prerequisites: 33:115, 33:167, and junior standing; or consent of instructor.

33:118(g). Technical Illustration — 3 hrs.

Pictorial drafting, shading, and rendering as used in manufacturing and architectural industries. Student may choose area of emphasis. Prerequisite: 33:022 or consent of instructor.

33:121. Industrial Wood Processing — 4 hrs.

Advanced operations and procedures of wood processing with emphasis on alternatives to solid wood fabrication, equipment maintenance, and safety principles and practices. Prerequisites: 33:011; 33:022; or consent of instructor.

33:123(g). Wood Technology I — 3 hrs.

Mass production in the woodworking industries; product selection and development; production machines; design of tools, jigs, and fixtures. Prerequisite: 33:121 or departmental approval.

33:124(g). Wood Technology II — 3 hrs.

Wood structure and properties, identification, lumber grading, and modified wood products. Prerequisite: 33:121 or departmental approval.

33:126. Applied Thermodynamics and Prime Movers — 3 hrs.

Develops concepts of thermodynamics and explores their application to industrial prime movers through lecture and laboratory experiences. Prerequisites: 33:036; 80:048; or consent of instructor.

33:127(g). Construction Techniques — 4 hrs.

Principles and application of carpentry, concrete, and masonry systems. Includes on-site construction activities. Prerequisites: 33:005 and 33:011; or consent of instructor.

33:128(g). Electrical and Mechanical Systems in Construction — 4 hrs.

Principles and applications of electrical, heating and cooling, and plumbing systems in residential and commercial buildings. Includes on-site construction activities. Prerequisites: 33:005 and 33:011; or consent of instructor.

33:129. Mechanical Power Systems — 3 hrs.

Develops concepts of mechanical power systems in detail through study of industrial applications. Prerequisites: 33:036; 88:054; or consent of instructor.

33:130(g). Metal — 2 hrs.

Advanced instruction in one of the following: oxyacetylene welding, electric arc welding, foundry, sheetmetal, metal spinning, ornamental iron, forging and heat treating, and art metal and enameling. Prerequisite: 33:011 or consent of instructor. May be repeated in different areas but credit toward degree may not exceed 8 hours.

33:132(g). Metallurgy — 3 hrs.

Basic principles and processes utilized in the making, shaping, and treating of metals and alloys used in the production industry. Prerequisites: 33:011, 86:020 or 86:044, or consent of instructor, and junior standing.

33:134(g). Metalcasting Technology — 3 hrs.

Green sand molding and other metalcasting processes, non-ferrous and ferrous melting and pouring practice cores, patternmaking and sand technology. Prerequisites: 33:011 or consent of instructor; junior standing.

33:135. Practicum in Material Processing Technology — 1 hr.

Participation in supervision of students in 33:011. Prerequisite: Minimum grade of B in 33:011 and consent of instructor.

33:136(g). Construction Surveying — 2 hrs.

Leveling, topographic surveying, triangulation, horizontal and vertical angles, area determination, and other basic construction applications of surveying procedures. Care and use of instruments, lecture and field exercises. Prerequisites: 33:005, 33:011, 33:018; or consent of instructor.

33:137(g). Construction Materials — 2 hrs.

Materials of construction; their properties, manufacture, characteristics and application. Prerequisites: 33:005, 33:011, 33:018; or consent of instructor.

33:141(g). Machine Tools — 4 hrs.

Advanced study in metal machining processes with emphasis on recently developed techniques and their application in industry. Prerequisite: 33:011 or consent of instructor.

33:143(g). Planning Manufacturing Systems — 4 hrs.

Designing and engineering the production system for an identified product; product analysis and testing, process engineering, tool design, quality control, plant layout, and material handling systems. Prerequisite: 33:016 or consent of instructor.

33:144(g). Controlling Manufacturing Systems — 4 hrs.

Fabricating and setting up tooling, production processes, quality control, and material handling systems for a production run; includes methods engineering, and marketing goods. Prerequisite: 33:016 or consent of instructor.

33:145(g). Improving Manufacturing Systems — 3 hrs.

Methods of assessing and improving manufacturing systems. Includes production analysis, manpower utilization, and work measurement. Prerequisite: 33:016 or consent of instructor.

33:148(g). Mechanisms: Design-Oriented Kinematics — 3 hrs.

Analysis of kinematic systems for displacement, velocity and acceleration. Topics include design of linkages, cams and gears by analytical and graphical methods. Prerequisites: 33:170 and 88:054, or consent of instructor; and junior standing.

33:149. Construction Estimating — 3 hrs.

Computer applications, activity node scheduling, and construction cost analysis techniques for estimating materials, labor, and fabrication costs in commercial building construction. Prerequisites: 33:167; 33:116; or consent of instructor.

33:150(g). Screen Printing Technology — 3 hrs.

Screen preparation methods, two- and three-dimensional printing, and color register printing; emphasis on technical information and laboratory experiences. Prerequisite: 33:155 or consent of instructor.

33:152(g). Industrial Electronics — 3 hrs.

Study of solid state devices and their use with other electronic components to make electronic systems for application in industry. Prerequisite: 33:038 or consent of instructor.

33:155. Graphic Arts — 4 hrs.

Introduces broad concepts and practices involved in placing graphics images onto solid materials. Involves two-dimensional design and layout, image assembly, photo-conversion, image carriers, image transfer, and finishing and binding.

33:156(g). Digital Electronics — 3 hrs.

The basic logic gates, fundamental digital circuits, and the tools and techniques used for analysis and application of digital circuits. Prerequisite: 33:152 or consent of instructor.

33:157(g). Introduction to Microcomputers — 3 hrs.

Microprocessors and supporting chips instructions, peripheral devices that constitute a functioning microcomputer. Software design and development, input-output devices, interfacing, and AD/DA conversion included. Prerequisites: 33:156; 81:070, or consent of instructor.

33:158(g). Lithographic Technology — 3 hrs.

Emphasizes photographic-computer type composition, halftone and special effects photography, multiple color stripping and platemaking, and operation of offset-lithography, single-color duplicator presses. Prerequisite: 33:155 or consent of instructor.

33:162(g). Applied Fluid Power — 3 hrs.

Basic fluid mechanics including pneumatics with emphasis on principles and applications to the fields of power, transportation, automation (production), and control. Practical mathematical problems and experiments provide greater insight. Prerequisite: 33:005 and 80:048; or consent of instructor.

33:166(g). Residential Construction — 4 hrs.

Analysis of systems and procedures for constructing residential structures. Emphasis on energy-efficient concepts and current practices of on-site construction plus analysis of industrialized housing units. Prerequisites: 33:005, 33:011, 33:018; or consent of instructor.

33:167(g). Commercial Construction — 3 hrs.

Systems and procedures for constructing commercial and industrial structures. Includes site layout, foundations, structural systems, floor-wall-roof systems; exterior and interior finishing. Prerequisites: 33:166 and junior standing or consent of instructor.

33:169(g). Applied Photography — 4 hrs.

Photographic fundamentals; emphasis on photographic systems; electrical, optical, mechanical, chemical and light-sensitive component areas. Prerequisite: 33:020 or consent of instructor.

33:170(g). Statics and Strength of Materials — 4 hrs.

Testing, evaluating, and reporting material characteristics and strength, and probable usefulness in the construction of products. Prerequisite: 88:054 or departmental approval.

33:171. Technical Work Experience — 2 hrs.

A supervised internship to gain practical occupational experience in the specialty area of approval. May be repeated once. Offered on Credit/No Credit basis only. Prerequisite: 1000 clock hours of approved work experience.

33:172(g). Materials Testing — 2 hrs.

Laboratory analysis, investigation, and testing of basic industrial materials with implications for industrial applications and environmental quality. Prerequisite: 86:020 or 86:044; or consent of instructor; junior standing.

33:173(g). Construction Management — 3 hrs.

Project management concepts — analysis and application of critical path scheduling, site planning, labor relations, and field supervision. Prerequisites: 33:166; 33:167; or consent of instructor.

33:174. P.L.U.S. Methodology and Conceptualization — 2 hrs.

Methods of information acquisition, processing, and presentation for the conceptualization of a problem in power technology for individual or group investigation. Prerequisites: junior standing; 12 hours of 100-level courses from the required technical core in the Power and Energy Technology Major, and consent of instructor.

33:176. P.L.U.S. Development and Demonstration — 4 hrs.

The development of the problem identified in the P.L.U.S. Methodology and Conceptualization phase through the developed prototype and presentation of the investigative results. Prerequisite: 33:174.

33:177(g). Industrial Plastics — 3 hrs.

Introduction to plastics; industrial molding, thermoforming, casting and coating, reinforcing, foaming, joining, fastening. Prerequisite: 33:011 or consent of instructor.

33:180. Orientation to Industrial Vocational-Technical Training — 2 hrs.

A sequence of learning experiences enabling the participant to demonstrate pre-service teaching competencies as required by the State Plan for the Administration of Vocational Education within Career Education for Iowa.

33:181(g). Trade and Technical Course Construction — 2 hrs.

Basic methods of identifying, analyzing, selecting, and organizing instructional content for vocational trade and technical programs.

33:182(g). Coordination of Part-time Industrial Education — 2 hrs.

Planning, organizing, developing, and teaching part-time cooperative industrial education programs.

33:183(g). Industrial Arts for the Elementary School — 2 hrs.

Also includes industrial arts for the junior high school.

33:184(g). Technical Program Development — 2 hrs.

Advanced methods of identifying, analyzing, selecting, and organizing instructional content for technical programs. Prerequisite: 33:181 or departmental approval.

33:187(g). Applied Industrial Supervision and Management — 3 hrs.
Investigation of industrial supervision and management; includes directed field study in industry. Prerequisite: 15:153 or 33:143 or consent of instructor.

33:188(g). Advisory Committees and Conference Leading — 2 hrs.
Principles and practices for organizing, developing, and using the advisory committee in vocational technical education, utilizing conference procedures and techniques.

33:190(g). Teaching Industrial Arts — 3 hrs.
Credit also as a course in education for a student whose major is industrial arts-teaching. Prerequisites: 33:019 and junior standing; or consent of instructor.

33:191(g). Methods of Teaching Trade and Technical Courses — 2 hrs.
Basic principles of instruction, instructional organization, methods of presentation, lesson planning and applications of audio-visual media.

33:193(g). Evaluation in Vocational-Technical Education — 2 yrs.
Basic concepts and techniques for evaluating students and programs in vocational-technical education. Prerequisite: 33:181 or departmental approval.

33:195(g). Designing Industrial Education Facilities — 2 hrs.
Concepts of layout and design, types of programs, architectural and engineering considerations; planning procedures; equipment selection, and facility evaluation. Prerequisites: 33:022 and 33:190; or consent of instructor.

33:196(g). Industrial Safety — 2 hrs.
Introduction to field of industrial safety with emphasis on compliance with Occupational Safety and Health Act (OSHA) in industrial and educational environments.

33:198. Independent Study.

33:214. Problems in Teaching Industrial Education — 4 hrs.
Educational problems selected according to interests and needs of students. Prerequisite: consent of instructor.

33:226. Foundations of Industrial Education — 4 hrs.
Leaders, movements, principles and curriculum techniques and trends.

33:228. Contemporary Theories — 2 hrs.
Practices and procedures in industry and education. Developments in technology.

33:270. Research Projects in Industrial Technology — 3 hrs.
Problems will involve investigation, application, demonstration, and reporting of research findings in specialized areas of industrial technology. May be repeated for a total of 9 semester hours. Prerequisite or corequisite: 33:292 or consent of instructor.

33:271. Industrial Experience — 2-3 hrs.
An opportunity for industrial technology students to integrate classroom learning and experience in an industrial setting. Limited to master's degree candidates. Prerequisites: consent of adviser and coordinator of graduate studies.

33:280. Curriculum Implementation, Management and Evaluation in Industrial Technology — 3 hrs.
Development of skills and techniques for successful installation, operation, and evaluation of a curriculum plan in industrial technology.

33:284. Industrial Technology — 2 hrs.
Offered in separate areas as shown in Schedule of Classes. Credit may be earned in more than one area but not repeated in a single area.

33:282. Industrial Technology Seminar — 1 hr.
Selected problems relating to Production Systems, Communication Systems, and Power Systems. May be repeated for up to a maximum of four semester hours of credit.

33:292. Research Methods in Industrial Technology — 3 hrs.
Principles of methods and evaluation of research in industrial technology. Individual exploration of possible projects or thesis topics.

33:299. Research.

33:375. Historical Developments in Industrial Technology — 3 hrs.
Development of Production Systems, Communication Systems, and Power Systems and their influence on society and the environment. Prerequisite: consent of instructor.

33:376. Contemporary and Future Developments in Industrial Technology — 3 hrs.

A study with emphasis on Production Systems, Communication Systems, and Power Systems, and their interrelationship with people, society, and the environment. Prerequisite: 33:375.

33:377. Readings in Technology and Society — 3 hrs.
Current readings on technology and society, emphasis on analysis and discussion of the issues. Prerequisite: 33:376.

33:388. Internship — 6 hrs.
Offered in education and industry to provide practical experience in teaching, supervision, administration, or management. May be taken once in educational environment and once in industrial environment. Prerequisite: consent of instructor.

33:399. Research (Doctoral Dissertation).

Library Science

E. Martin, Head. Hiland, W.D. Johnson, M. McGrew.

Library Science Minor — Teaching

Required: 35:110; 35:113; 35:115; 35:118; 35:121; 35:132
or 35:134; 24:131 20 hours

Students completing this minor can serve as teacher-librarian in kindergarten, grades 1-9, or grades 7-12, depending on the level of their basic teaching certificate.

Library Science — Teaching Endorsement

Students who already hold a bachelor's degree and a valid Iowa certificate may earn an Endorsement in Library Science for Teaching Certification without completing either an undergraduate major or a graduate degree in Library Science upon the successful completion of the following program. (This may be a combination of graduate and undergraduate credit.)

Required: 35:110; 35:113; 35:115; 35:118; 35:121;
35:225; 24:131 20 hours
Required: 35:132 or 35:134 3 hours
Required: 35:290 2 hours
Electives in Library Science or Educational Media 7 hours

35:010. Library Orientation — 1 hr.
Practical working knowledge of the library and its resources.

35:110(g). Libraries and Information Services — 2 hrs.
Historical development of libraries and graphic records; functions, organization patterns and services of different types of libraries.

35:113(g). Media Selection — 3 hrs.
Selection of many types of media, based on fundamental principles and objectives. Development of skill in using reliable selection aids and evaluating materials.

35:115(g). Cataloging and Classification — 3 hrs.

35:118(g). Reference — 3 hrs.
Study of basic reference sources, including introduction to question-negotiation and searching strategies and to reference services. Prerequisite: 35:113 or consent of instructor.

35:121(g). Introduction to the School Library Media Center — 3 hrs.
An examination of what constitutes the services and program of the instructional materials center.

35:123(g). The Media Program and the Teacher — 3 hrs.

Introduces to elementary and secondary teachers the school media specialist and the media center, its program and materials. (Not open to library science majors or minors.)

35:132(g). Library Materials for Children — 3 hrs.

Survey of school media with attention to selection principles, evaluation criteria, and utilization of book and non-book media for the elementary school curriculum.

35:134(g). Library Materials for the Secondary Schools — 3 hrs.

Selection and evaluation of curricular-related materials for secondary school student's reading, viewing and listening interests, habits, and needs.

35:210. The Profession of Librarianship — 1 hr.

The professional nature of library and information science, the literature and organization of the field, and past and present educational requirements and practices. Prerequisite: 35:110.

35:223. School Media Service — 3 hrs.

Survey of services available in an instructional materials center, and techniques used in interpreting services to students and teachers.

35:225. Administration of the School Library Media Center — 3 hrs.

Special problems in organization and administration of instructional materials centers. Prerequisite: 35:113; 35:121; and at least one other library science course.

35:230. Computer Applications in Libraries — 3 hrs.

Emphasis on applications of computers in libraries for: the acquisition, indexing, cataloging, retrieval, and dissemination of information and materials; the instruction of students; and resource sharing networks. Prerequisites: 35:113; 35:115; 35:118.

35:234. History of Books — 2 hrs.

Development of the book in various forms. History of the alphabet and writing; early writing materials; development of printing; and book publishing.

35:236. History of Children's Literature — 3 hrs.

Traces development of literature for children. Emphasis on significant authors, illustrators, and titles. Prerequisite: 35:132 or consent of instructor.

35:241. Topics in Library Materials — 3 hrs.

Selected aspects of K-12 school library media center materials. Participation in structuring learning experiences based on student needs and interests. Prerequisites: 35:113; 35:132 or 35:134 or consent of instructor.

35:285. Individualized Readings — 1-3 hrs.

Directed study of specific issue or problem based on student's need or aspirations. Prerequisite: written consent of department head.

35:289. Seminar in Librarianship — 2-3 hrs.

Critical assessment of the elements of school library service at the building and system levels. Prerequisite: 35:225 or consent of instructor.

35:290. Practicum in School Librarianship — 1-4 hrs.

Experience in the function and services of the instructional materials center. Prerequisite: written consent of the department head.

35:295. Research in Library and Information Science — 3 hrs.

Basic techniques of research methodology; historical, descriptive, and experimental; includes critical evaluation of library/media center studies and their influence on, or application to, services, organization, and administration.

35:299. Research.

Management

McAdams, Head. *Ashbaugh, Bernardo, Birru, Evenson, Frost, L. Goulet, P. Goulet, Jedlicka, Kirk, Mardis, Maughan, Mills, R. Morgan, E. Peterson, Rappaport, *Roth, Waller, Wilmesmeier, H. Wilson, Wyatt.

*on leave.

Note: To graduate with a major in management from the School of Business a student must complete 92:053, 92:054, 12:030, 12:031, 15:020, and 15:070 with at least a C — in each course whether taken at UNI or an institution from which transfer credit for these courses is accepted; must earn a 2.2 cumulative grade point average at UNI; and must earn an overall 2.2 grade point average in 12:xxx, 13:xxx, and 15:xxx courses taken at UNI.

Management Major

Required business core: 15:020; 15:070; 15:080; 15:100;

15:151; 15:153; 15:154; 15:175; 12:030; 12:031;

13:152; 92:053; 92:054 39 hour;

Required: 15:163; 15:165 6 hour;

Electives: at least 12 hours by completing one of the
three emphases listed below 12 hour;
57 hour;

1. Production Management

Required: 15:161 3 hour;

Required: 9 hours from 12:131; 15:105; 15:110;

15:180; 15:181 9 hour;

2. Financial Management

Finance Emphasis Requirements: 15:155; 15:156 6 hour;

Finance Electives (select one of the following
alternatives)

Alternative I: 12:129; 12:130 6 hours

Alternative II: (select two courses, minimum of 6
hours): 15:150; 15:152; 15:157; 15:158; 92:113 . 6 hours

3. Personnel/Human Resources Management

Required: at least 12 hours selected from 15:105;

15:166; 15:168; 18:119; 15:187 12 hours

Business Minor — Management

Required: 12:030; 13:152; 15:153 9 hours

Electives: at least 9 hours from management area 9 hours
18 hours

15:010. Introduction to Business — 3 hrs.

Role of business in United States and world. Examines social, legal, and economic variables affecting business operations; includes functions of accounting, finance, management, marketing, and production. No credit for student who has credit in or is concurrently taking 15:151, 15:153, or 13:152.

15:020. Quantitative Methods for Business — 3 hrs.

Quantitative and qualitative aspects of problem solving and decision making. Includes: structuring and basics of decision making, classification theory, functional relationships, marginal analysis, linear programming, and probability. Recommended prerequisite: 4 years of high school mathematics or 80:040.

15:070. Business Statistics — 3 hrs.

Application and interpretation of probability and statistics as applied to business problems; design of experiment, descriptive statistics, sampling, estimation, correlation and linear regression.

15:080. Basic Computer Concepts — 3 hrs.

Introduction to the techniques and procedures of data processing. Analysis and study of data processing systems, including punch card equipment and electronic computers. (same as 18:070.)

15:100. Introduction to Law and the Legal System — 3 hrs.
Basic principles underlying the American legal system.

15:101(g). Business Law I — 2 hrs.
Contracts and sales.

15:102(g). Business Law II — 2 hrs.
Partnerships, corporations, and commercial paper.

15:104(g). C.P.A. Law Review — 3 hrs.
Intensive study of Business Law to prepare accounting students for the law part of the C.P.A. examination. Prerequisites: 15:101; 15:102; qualified to sit for C.P.A. examination.

15:105(g). Labor Law — 3 hrs.
Current Labor Law and Legislation in its present social setting as conditioned by historical landmarks. Emphasis on the National Labor Relations Act. Prerequisite: 15:100 or 15:101 and 15:102.

15:107(g). Arbitration and Collective-Bargaining — 3 hrs.
Collective bargaining; strategies and tactics; issues in collective bargaining; arbitration provisions of the Taft-Hartley Act; the arbitration proceeding. Case problems. Prerequisite: 15:105.

15:110(g). Operations Research in Business — 3 hrs.
Basic principles and techniques of operations research; includes topics of forecasting, decision, theory, inventory models, linear programming, simulation, network models, and Markov analysis. Prerequisites: 15:020; 15:070; 15:080.

15:150(g). Management of Financial Institutions — 3 hrs.
Broad study of major decisions and policies involved in the financial management of financial institutions; includes asset management, liabilities management, and public issues. Prerequisites: 15:151; 92:113.

15:151(g). Corporation Finance — 3 hrs.
Study of role of finance function within the corporate enterprise. Prerequisites: 12:031; 15:070 or equivalent; 92:053; 92:054 (Business Education majors may substitute 92:024 for 92:054).

15:152(g). Principles of Investments — 3 hrs.
Investment decision making, analysis, and management; includes descriptive analysis of various investment media, techniques of value analysis, and basic topics in portfolio management. Prerequisite: 15:151.

15:153. Fundamentals of Management — 3 hrs.
Basic principles of management with emphasis on the behavioral approach to the scientific management of organization. Prerequisite: junior standing.

15:154(g). Operations Management — 3 hrs.
Principles of management of productive processes in both manufacturing and service industries. Topics include organizational structure, product selection, process design, capacity and location management, quality management, forecasting, inventory management, and job design. Prerequisites: 12:031; 15:070.

15:155(g). Advanced Financial Management I — 3 hrs.
Financial decision making at the managerial level; includes financial analysis and planning and the management of working capital. Instruction will utilize textual material, case studies, and readings in the finance literature. Prerequisite: 15:151.

15:156(g). Advanced Financial Management II — 3 hrs.
Continuation of 15:155. Topics include: Capital asset acquisition decisions, permanent financial sources, and other special topics of interest. Prerequisite: 15:155.

15:157(g). Principles of Real Estate — 3 hrs.
Introduction to nature of real estate, its investment value, and related decision analysis; includes appraisal, investment analysis, location theory, financing, legal characteristics, and development. Not designed as pre-license course for sales personnel. Prerequisite: 15:151 or consent of instructor.

15:158(g). International Financial Management — 3 hrs.
Study of financial decision making in an international context. Topics include: financing international trade, management of foreign exchange risk, investment analysis, working capital management, and international taxation. A case study approach is used. Prerequisite: 15:151 and junior standing.

15:161(g). Production Management — 3 hrs.

Principles and techniques of management of production systems. Demand forecasting, aggregate planning, master scheduling, material requirements planning, inventory management, capacity planning, shop floor control. Prerequisites: 15:070; 15:151; 15:153; 15:154.

15:163(g). Management Decision Making — 3 hrs.

The nature of organizational decisions; problem identification and structuring; methods of decision making on the certainty-uncertainty continuum. Prerequisites: 15:160; 15:165.

15:165(g). Organizational Behavior — 3 hrs.

Examination of micro and macro issues found within an organization which would include: people, technology, environment, and structure. Prerequisites: 15:070; 15:153.

15:166(g). Staffing — 3 hrs.

Study of personnel selection and placement; includes manpower forecasting, recruiting, interviewing, testing, equal employment opportunity, and affirmative action considerations. Prerequisites: 15:153; 15:165.

15:168(g). Compensation Administration — 3 hrs.

Analysis of theories, strategies and models of assessing and rewarding human performance. Examination of the development of sound wage and salary structure, executive compensation, financial incentives and benefits. Prerequisites: 15:153; 15:165.

15:169(g). Management Internship — 2-8 hrs.

Full-time business internship in management extending for a minimum of eight weeks. Prerequisites: departmental approval and 2.5 cumulative grade point average.

15:170(g). Special Problems — 1-3 hrs.

Credit determined at registration. Student will choose one of the following areas:

1. Management
2. Law
3. Finance
4. International Business

May be repeated with the concentration in different areas. Prerequisite: consent of the head of the department.

15:175. Business Policy and Strategy — 3 hrs.

Interpretation of relationships between the various business disciplines and utilization in administrative decision making. For senior business majors. Prerequisite: completion of rest of "business core."

15:180(g). Topics in Operations Management and Operations Research — 3 hrs.

Topics of immediate interest from general areas of operations management and operations research. May include computer simulations, regression analysis, advanced inventory models. Prerequisite: consent of instructor.

15:181(g). Management Information Systems — 3 hrs.

Information systems analysis and design for communication techniques in the organization; analysis and design for management decision making and control. Prerequisites: 15:080; 15:153.

15:184(g). Technology, Environment and Organizations — 3 hrs.

A systems analysis of the technology employed by an organization, the socio-economic environment faced by the organization, and how these two variables influence organizational structure, behavior, and performance. Prerequisite: 15:153.

15:187(g). Organizational Design — 3 hrs.

An application of concepts presented in 15:153 and 15:165 to a field-based experience in designing solutions to organizational problems.

15:189. Seminar in International Business — 3 hrs.

Problems of organizing, financing, and operating multinational enterprises, and the impact of multinational business upon a world economy. Prerequisite: 13:152; 15:153; and junior standing.

15:210. Legal and Social Environment of Business — 3 hrs.

Investigates the judicial process, organization of the legal system, and the conceptual development of this system with substantive emphasis in the area of anti-trust, trade regulation, and labor-management. Prerequisite: consent of MBA adviser.

15:220. Advanced Business Statistics — 3 hrs.

Multiple linear regression and correlation of business and economic data. Analysis of variance, residuals; use of dummy variables; stepwise regression and statistical model building. Applications. Prerequisites: 15:070; consent of MBA adviser.

15:260. Administrative Theory and Practice — 3 hrs.

Advanced topics in decision making, planning, cybernetics, and applied systems. Prerequisite: consent of MBA adviser.

15:262. Managerial Concepts — 3 hrs.

Analysis of current administrative philosophy and practices, their historical foundations; integration of an organization from the administrator's viewpoint. Prerequisite: 15:153 or equivalent; and consent of MBA adviser.

15:263. Financial Management — 3 hrs.

Concepts of financial management for the student having the basic background; emphasis on theoretical approach to complex problems (capital acquisition, analysis of capital projects, and financial analysis). Prerequisite: consent of MBA adviser.

15:264. Advanced Financial Management — 3 hrs.

Financial decision making for student with the basic background in business and introductory finance; expands practical ability to deal with complex financial decisions. Prerequisite: consent of MBA adviser.

15:266. Quantitative Decision Making — 3 hrs.

Role of sampling and statistical control procedures in managerial decision making under conditions of risk and uncertainty. Fundamental probability distributions and their use in classical and Bayesian inference. Prerequisites: 15:020; 15:070; or equivalent; and consent of MBA adviser.

15:267. Operations Management — 3 hrs.

Introduction to analysis, design, and management of systems. Prerequisites: 15:070; 15:167; 15:266; or equivalent; and consent of MBA adviser.

15:285. Individual Readings — 1-3 hrs.

Directed readings and reports. May be repeated for a maximum of 4 hours. Prerequisite: consent of MBA adviser.

15:289. Seminar in Business Policy — 3 hrs.

Should be taken in student's last semester of graduate study. Prerequisite: consent of MBA adviser.

15:297. Practicum.

Prerequisite: consent of MBA adviser.

15:299. Research.

Prerequisite: consent of MBA adviser.

Marketing

*Corbin, Acting Head. Brooks, Burrow, Clayson, S. Diamond, Kagan, R. Lee, Pelham, Penn, *Schibrowsky, *Tate, N. Wilson, Wubben,*

**on leave.*

Note: To graduate with a major in Marketing from the School of Business a student must complete 12:030, 12:031, 15:020, 15:070, 92:053, 92:054 with at least a C- in each course whether taken at UNI or an institution from which transfer credit is accepted; must earn a 2.2 cumulative grade point average at UNI, and must earn an overall 2.2 grade point average in 12:xxx, 13:xxx, and 15:xxx courses taken at UNI.

Marketing Major

Required business core: 12:030; 12:031; 13:152; 15:020;

15:070; 15:080; 15:100; 15:151; 15:153; 15:154;

15:175; 92:053; 92:054 39 hours

Required: 13:140; 13:151 6 hours

Electives: at least 12 hours from one of the emphases listed below 12 hours

1. Marketing Management: 13:174; 13:175; 13:176; 13:170 or 13:189.

2. Sales and Promotion: 13:147; 13:153; 13:155; 13:170 or 13:175.

3. Retailing Management: 13:141; 13:143; 13:147; 13:170 or 13:175.

4. Commodity Marketing: 13:156; 13:160; 13:161; 13:155 or 13:169.

Chemistry — Marketing Major

This is an interdisciplinary major offered by the Department of Chemistry and the School of Business, and is under the jurisdiction of the Department of Chemistry. The Department of Chemistry is responsible for advising students enrolled in the major. Required for the major are 24-27 semester hours in chemistry and 27 hours of business for a total of 51-54 hours. See page 59 for complete details of the major program.

Marketing Minor

Required: 13:140; 13:151; 13:152; 15:020; 15:070; 92:024

or 92:053 18 hours

Electives: at least 12 hours from one of the areas listed below 12 hours

30 hours

Areas —

1. Sales and Promotion: 13:147; 13:153; 13:155; 13:170 or 13:175.

2. Retailing Management: 13:141; 13:143; 13:147; 13:170 or 13:175.

3. Commodity Marketing: 13:156; 13:160; 13:161; 13:155 or 13:169.

13:140(g). Consumer Behavior and Marketing Decisions — 3 hrs.

Recent findings of psychologists, sociologists, and anthropologists, and marketers in relationship to internal and external influences on buyer behavior and marketing-related decision making. Prerequisite: 13:152.

13:141(g). Retail and Wholesale Marketing — 3 hrs.

Comparison of retailing and wholesaling fundamentals, integration of marketing, finance, economics, statistics, behavioral sciences, and retail mathematics into solving retailing and wholesaling problems. Prerequisite: 13:152.

13:143(g). Retail Merchandising and Management — 3 hrs.

Study of retail management problems from merchandising/mathematical decision-making strategy concept. Trade area analysis; financial analysis including expense and profit computations; pricing policies; inventory evaluation; and sales and stock record analysis. Prerequisite: 13:141.

13:147(g). Advertising and Promotional Management — 3 hrs.

Decision making in advertising and sales promotion; emphasis on advertising and promotional techniques, establishing budgets, and evaluating effectiveness of advertising and promotional endeavors. Prerequisites: 13:140 and 13:152.

13:151(g). Marketing Research — 3 hrs.

Procedures used in defining a marketing problem and carrying out the research necessary for its proper solution. Prerequisites: 13:152; 15:020; 15:070.

13:152. Principles of Marketing — 3 hrs.

Facets in the distribution of goods and services. Prerequisites: 92:024 or 92:053; junior standing.

13:153(g). Sales Management — 3 hrs.

The management problems relating to recruiting, training, and control of sales personnel. Methods of assigning sales territories and determining quotas. Prerequisite: 13:152.

13:155(g). Industrial Marketing — 3 hrs.

Marketing problems of manufacturers of industrial goods. Prerequisite: 13:152.

13:156(g). Agribusiness — 3 hrs.

Introduction to food and fiber industries; agricultural product industries at various stages; retailing, wholesaling, processing, farming and farm supply; effect of technology, economic, social and political environments on the production and marketing of agricultural products. Prerequisite: junior standing.

13:157(g). International Marketing — 3 hrs.

Marketing practices and trends in businesses serving foreign markets. Prerequisites: 13:152.

13:160(g). Commodity Marketing — 3 hrs.

Marketing aspects of the ag-business sector, commodity interactions, patterns, and trends of agricultural product marketing. Prerequisites: 13:152; 92:053.

13:161(g). Futures and Forecasting of Commodity Markets — 3 hrs.

Use of futures marketing and market price forecasting within agricultural markets. Prerequisite or corequisite: 13:160.

13:169(g). Internship-Marketing — 2-8 hrs.

Full-time internship in a marketing-related business for a minimum of eight weeks. Prerequisites: departmental approval; 2.5 cumulative UNI grade point average; and senior standing.

13:170(g). Entrepreneurship and Small Business Management — 3 hrs.

Identifying and developing entrepreneurship skills and attitudes; elements of small business operations and management. Prerequisites: 13:140; 13:151.

13:174(g). Product Personalities — 3 hrs.

Problems approach to the "value added" concept of product offerings in the market place. Prerequisite: 13:140 and 13:152.

13:175(g). Marketing Strategy and Analysis — 3 hrs.

Application approach to the building of marketing strategies based on market opportunity analysis; segmentation; forecasting; quantitative evaluation; integration. Prerequisites: 13:140; 13:151.

13:176(g). Marketing Models and Information Systems — 3 hrs.

Examines conceptual models currently used by marketing practitioners; emphasis on operationalizing these models with live case examples and application to information systems via computer technology. Prerequisites: 15:080; 13:152.

13:179. Cooperative Education in Marketing — 1-6 hrs.

Offered only on ungraded (credit/no-credit) basis.

13:180(g). Special Problems — Marketing — 1-3 hrs.

Directed readings, reports, and/or projects. May be repeated for a maximum of 4 hours. Prerequisite: consent of department head.

13:189(g). Seminar in Marketing Policy — 3 hrs.

Study of corporate marketing management concepts and attendant theories, distinguishing characteristics of marketing organizations, and marketing management career opportunities. Prerequisites: senior standing; and prerequisite or corequisite: 13:175.

13:198. Independent Study.

Prerequisite: departmental consent; 3.0 cumulative UNI grade point average; senior standing.

13:251. Marketing Theory — 3 hrs.

Evolutions of marketing concepts and future marketing influences; contributions of economic and behavioral sciences to marketing thought; implication of marketing theory to management practice. Prerequisites: 13:263 and consent of MBA adviser.

13:257. Multinational Business — 3 hrs.

Cultural, economic, and political developments of major trading areas of the world; their roles as producers and consumers in world markets; problems of organizing, financing, and operating affiliates and subsidiaries doing business abroad; marketing problems of multinational business. Prerequisites: 13:263; and consent of MBA adviser.

13:263. Marketing Management — 3 hrs.

Integrated approach to marketing from managerial viewpoint using economic, quantitative, and behavioral concepts in analyzing and developing framework for decision making and implementing a marketing program. Prerequisites: 13:152; and consent of MBA adviser.

13:285. Individual Readings — 1-3 hrs.

May be repeated for a maximum of 4 hrs. Prerequisite: departmental consent, and consent of MBA adviser.

13:297. Practicum — 1-3 hrs.

Prerequisite: departmental consent and consent of MBA adviser.

13:299. Research — 1-6 hrs.

Prerequisite: departmental consent and consent of MBA adviser.

Mathematics and Computer Science

Duncan, Head. Baum, Beck, Bruha, Campbell, Cross, Dotseth, Farzaneh, Litwiller, Longnecker, Lott, Melara, Miller, Myung, G. Nelson, Rathmell, Rule, Schurrer, Thiessen, Walljasper, C. Wehner, Wetterlind, Wilkinson.

All of the undergraduate major and minor programs in the Department of Mathematics and Computer Science (except for the Computer Information Systems Major and the Computer Science Minor) require one or more of the courses: 80:060, 80:061, and 80:062 (Calculus I, II, and III). The course 80:046 (Elementary Analysis) is the prerequisite for 80:060, but may be bypassed by a student who did well in four years of high school college-preparatory mathematics. The course 80:040 (Basic Collegiate Mathematics) is essentially a service course but may also be used, if needed, as preparation for 80:046. Any questions concerning a student's proper initial placement in the 80:040, 80:046, 80:060, 80:061, and 80:062 sequence should be directed to the Department of Mathematics and Computer Science.

A student who elects an undergraduate major in mathematics may want to complete at least one minor in some field of application such as physics, chemistry, biology, economics, sociology, or accounting.

Students who plan to continue their work in mathematics beyond the B.A. level are urged to begin the study of at least one foreign

language. Russian, German, and French are particularly recommended. Some students will, by careful use of their electives, be able to complete both a language minor and a minor in a field in which mathematics is applied.

Note: A student majoring in Mathematics, Computer Science, or Computer Information Systems who has a grade point average of less than 2.25 in all departmental courses used for that major may not apply to his/her major a departmental course in which a grade of less than C- is earned.

Mathematics Major — Teaching

Required: Completion of 80:062

Required: 80:160; 80:165; 80:190; 81:071

Electives: 12 additional hours chosen from the following list of courses; and must include courses in either algebra or geometry and at least one additional area:

Algebra: 80:161, 80:162

Analysis: 80:140, 80:141; 80:147; 80:148; 80:156

Computer-Related Mathematics: 80:074; 80:176; 80:177; 80:184; 80:187

Geometry: 80:155; 80:166; 80:189; 80:197

Mathematical Logic: 80:169; 80:182; 80:183; 80:188

Probability and Statistics: 80:153; 80:174; 80:175

Topology: 80:167; 80:168

The total program will depend upon a student's background and will vary from 25 to 48 hours.

For departmental approval to student teach, a student on the program must satisfy the university requirements to student teach and the following specific departmental requirements:

1. Must successfully complete 80:062; 80:160; 80:165; 80:190, and 81:071.
2. All grades in departmental courses to be applied to this program must be C- or higher, unless the student's grade point average is 2.25 or higher in all the departmental courses to be applied to this program.

Mathematics Major

Plan A

Required: The completion of 80:062

Electives: 20 hours from at least three of the following areas with two of these including two-semester sequences:

Probability and Statistics: 80:153; 80:174; 80:175

Algebra: 80:160; 80:161; 80:162

Geometry: 80:155; 80:165; 80:166; 80:189; 80:197

Analysis: 80:1410; 80:141; 80:147; 80:148; 80:156

Computer-Related Mathematics: 80:074; 80:176; 80:177; 80:184; 80:187

Mathematical Logic: 80:169; 80:182; 80:183; 80:188

Topology: 80:167; 80:168

with additional electives in mathematics or computer science to make a total of 20 hours.

The total hours will depend on a student's background and will vary from 20 to 43 hours.

None of the courses 80:020, 80:030, 80:111, 80:112, 80:113, 80:131, 80:134, 80:139, 80:179, 80:190, 80:191, 80:192, 81:025, 81:070, and 81:179 may be used to satisfy requirements on this program.

Plan B — Computational Emphasis

Required: the completion of 80:062

Required: 80:050; 81:070; 81:071; 80:149; 80:176; 80:177; 80:184

Required: 6 hours from the following:

80:150; 80:153; 80:154; 80:160; 80:165; 80:166; 80:169; 80:174; 80:175; 80:187.

The total program hours will depend upon the student's background and will vary from 27 to 51 hours.

Plan C

Required: Completion of 80:062

Required: 80:140; 80:141; 80:160; 80:161; 80:167

Electives: at least 10 additional hours to be chosen from the following areas:

Algebra: 80:162

Analysis: 80:147; 80:148; 80:149; 80:150; 80:156

Geometry: 80:155; 80:165; 80:166; 80:189; 80:197

Mathematical Logic: 80:169; 80:182; 80:183; 80:188

Probability and Statistics: 80:174; 80:175

Topology: 80:168

The total program hours will depend on the student's background and will vary from 26 to 46 hours.

This plan is primarily for the student who wishes to pursue graduate study in mathematics with the possible intent of attaining the doctoral degree.

Computer Information Systems Major

Required mathematics*: 80:050; 80:072; 80:074 10 hours

Required computer science core**: 81:071; 81:120;

81:130; 81:135; 81:140 15 hours

Required software engineering: 81:145; 81:150 6 hours

Required business foundations: 12:030; 12:031; 13:152;

15:151; 15:153 15 hours

Electives in computer science: 3 of the following:

81:110; 81:111; 81:178; 15:181 9 hours

55 hours

*Some students should complete 80:040 and/or 80:046 before pursuing the courses in this section.

**Some students should complete 81:070 before pursuing the courses in this section.

Computer Science Major

Required mathematics*: 80:060; 80:061; 80:074 12 hours

Required computer science core**: 81:071; 81:120;

81:130; 81:135; 81:140 15 hours

Required software engineering: 81:145 or 81:150 3 hours

Electives in computer science***: four of the following

courses: 80:176; 80:177; 80:184; 80:187; 81:110;

81:111; 81:145; 81:150; 81:155; 81:160; 81:178 12 hours

42 hours

*Some students should complete 80:040 and/or 80:046 before pursuing the courses in this section.

**Some students should complete 81:070 before pursuing courses in this section.

***No course may be counted for both elective and required credit.

Mathematics Minor — Teaching

A minimum of 24 hours is required as follows:

- Required: 80:046*; 80:060; 80:160 and/or 80:165;
80:190; 81:070 and/or 81:071 17-24 hours
- Electives from: 80:061; 80:062 (80:063 for majors in physical science); 80:072; 80:080; 80:144; 80:149; 80:180; 80:181; the courses listed in the seven areas of the Mathematics Major — Teaching to make a minimum total of 24 hours

*A well-prepared student may be exempted from 80:046 if departmental approval is secured; this exemption reduces the minimum minor program hours from 24 to 20.

Mathematics Minor

A minimum of 20 hours is required as follows:

- Required: 80:060
- Electives: courses from 80:061; 80:062 (or 80:063 for majors in a physical science); 80:072; 80:080; 80:120; 80:144; 80:149; 80:163; 80:180; 80:181; the courses listed in the seven areas of the Mathematics Major (Plan A) to make a minimum total of 20 hours

Computer Science Minor

- Required: a minimum of 15 hours from 80:050; 80:074; 80:149; 80:176; 80:177; 80:184; 80:187; 81:071; 81:110; 81:111; 81:120; 81:130; 81:135; 81:140; 81:145; 81:150; 81:155; 81:160; 81:178* .. 15 hours

At least 12 of these 15 hours must carry an 81 prefix.

*May be repeated once for credit on a different topic.

Mathematics Subject Field — Middle School/Junior High Education Major

- Required: 80:030; 80:111*; 80:112; 80:134; 80:191; 81:070 18 hours
- Required: 80:048 or 80:060; 80:072 or 80:153; 80:113 or 80:144 10 hours
- 28 hours

*Departmental permission to use 80:046 instead of 80:111 will be granted when conditions warrant.

(**See Department of Curriculum and Instruction, page 68.)

Mathematics

80:020. Survey of Mathematical Ideas — 3 hrs.
The language and ideas of mathematics.

80:030. Mathematics for Elementary Teachers I — 3 hrs.
Sets, relations, numeration systems, number theory and models for problem-solving. Extension of number concepts through a study of whole, integer, rational and real number systems as they relate to the K-8 mathematics curriculum.

80:040. Basic Collegiate Mathematics — 4 hrs.
Fundamental mathematical concepts; functions and graphs, solutions of equations; elementary trigonometry; systems of equations and inequalities; matrices and determinants. Applications.

80:046. Elementary Analysis — 4 hrs.
Pre-calculus mathematics. Equations and inequalities. Logarithms, exponential and circular functions. Analytic trigonometry, analytic geometry, mathematical induction. Applications.

80:048. Condensed Calculus — 4 hrs.

Survey of analytic geometry and elementary calculus with emphasis on applications. May not be applied to Mathematics major or minor. Prerequisite: 80:040 or equivalent.

80:050. Matrices with Applications — 3 hrs.

Introduction to matrices, systems of linear equations, vector spaces and linear mappings, rank and inverses, determinants, characteristic values and characteristic vectors. Prerequisite: 80:046. Students with credit in 80:161 should not enroll in this course without permission of the head of the department.

80:060. Calculus I — 4 hrs.

The derivatives and integrals of elementary functions and their applications. Prerequisite: 80:046.

80:061. Calculus II — 4 hrs.

Continuation of 80:060, which is a prerequisite.

80:062. Calculus III — 4 hrs.

Continuation of 80:061, which is a prerequisite.

80:063. Mathematical Methods for the Physical Sciences — 4 hrs.

Series, complex numbers, multivariable calculus and Fourier series; developed from an applied point of view. May replace 80:062 for a student with a major in a physical science. Student may not earn credit for both 80:062 and 80:063. Prerequisite: 80:061.

80:072. Introduction to Statistical Methods — 3 hrs.

Descriptive statistics including correlation and curve fitting. Intuitive treatment of probability and inferential statistics including estimations and hypothesis testing. Students with credit in 80:172 should not enroll in 80:072.

80:074. Discrete Mathematics — 4 hrs.

Introduction to mathematical reasoning, sets, relations and functions with applications in computer science. Prerequisites: 81:070; 80:050 or 80:060.

80:080. Mathematics of Finance — 2 hrs.

Interest, annuities, and life insurance. Prerequisite: 80:040 or consent of instructor.

80:109(g). Readings in Mathematical Literature — 2 hrs.

May be repeated for credit. Prerequisite: departmental approval.

Note: 80:111, 112, and 113 are designed especially for elementary majors with mathematics subject field and for advanced graduate students with meager backgrounds who want to do serious work not involving calculus.

80:111(g). Introduction to Analysis — 4 hrs.

A study of the properties of the real numbers; linear equations, functions, inequalities; linear systems including systems of inequalities and linear programming; complex numbers; quadratic relations; and circular and exponential functions. Prerequisite: departmental approval or 80:030. No credit for a student who has credit in 80:046.

80:112(g). Introduction to Geometry — 4 hrs.

Topics in three divisions of geometry, namely (1) Greek geometry; (2) contemporary developments in Euclidean geometry; (3) foundations and other geometries. Prerequisite: departmental approval or 80:030.

80:113(g). Topics in Mathematics — 3 hrs.

Topics in number theory, geometry, and algebra not included in the prerequisite courses. Topics will be selected from the following: divisibility; congruence; continued fractions; theory of proportion; applications of mechanics in geometry; maximum and minimum problems in geometry; linear programming; Fibonacci numbers; transfinite arithmetic; mathematical induction. Prerequisite: 80:111 and 80:112.

80:120(g). Elementary Game Theory — 3 hrs.

Zero and non-zero sum games. Games with and without saddle points. Strategies, linear programming, games with complete and incomplete information. Particular interest to students in business and social science. Prerequisite: 80:040 or consent of instructor.

80:131. Mathematics for Elementary Teachers II — 3 hrs.

Probability, statistics, non-metric geometry, and measurement, including the metric system, as they relate to the K-8 mathematics curriculum. Prerequisite: 80:030.

80:134. Teaching of Mathematics in the Elementary School — 2 hrs.

Explores relationship between the psychology of learning and child development in the teaching of mathematics at the elementary school level; includes teaching strategies and management models. Prerequisites: 80:030; 80:112 or 80:131.

80:136(g). Metric System and Measurement — 2 hrs.

Basic ideas of measurement (e.g., meaning, standard units, and errors). Experiments for experiences with metric units for length, area, volume, mass and temperature. Simple conversion techniques between and within systems. This course is available only through correspondence.

80:139. Seminar for the Elementary Teacher — 2 hrs.

Offered on special topics as indicated in Schedule of Classes. Prerequisites: two content courses in mathematics and 80:134 or 80:190. May be repeated for credit on a different topic for a maximum of 4 hours.

80:140(g). Intermediate Mathematical Analysis I — 3 hrs.

Algebraic and topological structure of the reals. Limits and continuity. Theory of differentiability of functions of a single real variable. Prerequisite: 80:062 or 80:063.

80:141(g). Intermediate Mathematical Analysis II — 3 hrs.

Riemann integration. Sequences and series of functions. Introduction to Lebesgue integration. Prerequisite: 80:140.

80:144(g). Elementary Number Theory — 3 hrs.

Topics from prime numbers, elementary theory of congruence, continued fractions. Diophantine equations. Fibonacci numbers, Pell's equation, the golden rectangle. Pythagorean triples and transfinite numbers. Prerequisite: 80:046 or 80:111.

80:147(g). Advanced Calculus I — 3 hrs.

Series and sequences of functions. Theory and application of multivariable functions. Emphasis on applications. Prerequisite: 80:062 or 80:063.

80:148(g). Advanced Calculus II — 3 hrs.

Continuation of work with multivariable functions. Special functions, calculus of variations. Fourier series and transforms. Prerequisite: 80:147.

80:149(g). Differential Equations — 3 hrs.

Elementary theory and applications of first order differential equations. Introduction to numerical techniques of solving differential equations. Solutions of n th order linear differential equations with constant coefficients. Prerequisite: 80:062.

80:150(g). Partial Differential Equations — 3 hrs.

A study of applied partial differential equations using heat, wave and potential equations as a basis; Fourier Series and integrals; Laplace transformations. Prerequisite: 80:149.

80:153. Probability Theory — 3 hrs.

Discrete sample spaces, conditional probability, Bayes' formula, random variables, probability functions, expected value. Chebychev's Theorem, applications. Prerequisite: 80:046 or 80:111.

80:154(g). Introduction to Stochastic Processes — 3 hrs.

Elements of stochastic processes. Markov chains, random walk, applications. Prerequisite: 80:153 and 80:061.

80:155(g). Elementary Differential Geometry — 3 hrs.

The analytic study of curves and surfaces in three-dimensional Euclidean space. Prerequisites: 80:062 and 80:165.

80:156(g). Introduction to Complex Analysis — 3 hrs.

Differentiation and integration of functions of a single complex variable. Taylor and Laurent expansions. Conformal mapping. Prerequisite: 80:062.

80:160(g). Modern Algebra I — 3 hrs.

An introduction to the study of algebraic systems. Includes: groups, rings, fields, homomorphisms and isomorphisms. Prerequisite: 80:061 or equivalent.

80:161(g). Linear Algebra — 3 hrs.

Vector spaces, linear transformations, dimension, inner products, matrices, determinants, minimal polynomial, Jordan canonical form, eigenvalues and eigenvectors. Applications. Prerequisite: 80:160.

80:162(g). Modern Algebra II — 3 hrs.

A continuation of 80:160. Includes groups with operators, modules over rings, Sylow theorems, composition series, semisimple and simple rings, field theory and introduction to Galois theory. Prerequisite: 80:160.

80:163(g). Lattices and Boolean Algebra — 3 hrs.

Elementary lattice theory and applications to logic, electrical networks, and geometry. Boolean functions and Boolean Algebras. Boolean rings and their representations. Prerequisite: 80:046.

80:165(g). Introduction to Modern Geometries — 4 hrs.

Foundations of geometry, basic concepts of Euclidean and non-Euclidean geometries. Prerequisite: 80:046.

80:166(g). Introduction to Linear Geometry — 3 hrs.

Basic concepts and properties of convex sets in two, three, and higher dimensions. Convex polyhedra. Applications to maxima-minima problems in geometry, graph theory and linear programming. Prerequisite: 80:165 or consent of instructor.

80:167(g). Topology I — 4 hrs.

An introductory study of metric spaces, completeness, topological spaces continuous functions, compactness, connectedness, separability, product and quotient spaces. Prerequisite: 80:061.

80:168(g). Topology II — 3 hrs.

A continuation of 80:167. Two and n -dimension manifolds, orientable manifolds, the fundamental group of a space, free groups, covering spaces, application to geometry and knot theory. Prerequisite: 80:160 and 80:167.

80:169(g). Mathematical Logic I — 40 hrs.

An introduction to the semantics and syntax of the propositional calculus and the predicate calculus. Elements of the theory of algorithms. Prerequisite: 80:060 or consent of instructor.

80:172(g). Statistical Methods — 3 hrs.

Descriptive statistics including graphical representation, central tendency and variation, correlation and regression. Elementary probability. Problems of estimation and hypothesis testing from an intuitive approach. Use of statistical packages such as SAS or SPSS. Students with credit in 80:072 or 80:174 may not enroll in 80:172.

80:174(g). Mathematical Statistics I — 3 hrs.

Continuous random variables, moment generating functions, central limit theorem, sampling distributions; testing hypotheses and estimation. Prerequisite: 80:062; and either 80:153 or consent of instructor.

80:175(g). Mathematical Statistics II — 3 hrs.

Continuation of 80:174. Small sample theory, simple models in analysis of variance. Prerequisite: 80:174.

80:176(g). Introduction to Numerical Analysis — 3 hrs.

An introduction to mathematical methods applicable to the digital computer including finite differences, numerical integration and differentiation, solution of linear and nonlinear equations, and solutions of ordinary differential equations with initial conditions. The writing and execution of programs involving these methods. Prerequisite: 80:061 and 81:070.

80:177(g). Introduction to Optimization — 3 hrs.

Mathematical techniques used to solve optimization problems; topics from classical optimization techniques, search techniques, linear programming using the simplex method, non-linear programming, integer programming. Prerequisites: 81:070; 80:050.

80:180(g). History of Mathematics — 3 hrs.

Survey of mathematical activities of mankind, the motives and influences affecting the development of mathematics. Prerequisite: 80:046.

80:181(g). Philosophy of Mathematics — 3 hrs.

Consideration of views on foundations of mathematics and such topics as the role and possible limitations of mathematics in scientific investigation; the significance of logical constructs in mathematics. Prerequisites: A Humanities course, plus one semester of calculus and at least one additional mathematics course.

80:182(g). Introduction to Set Theory — 3 hrs.

The axioms of set theory. Relations and functions. Equivalence and ordering relations, ordinal numbers and transfinite induction. Ordinal arithmetic. Zorn's lemma, well-ordering and the axiom of choice. Cardinal numbers and the Cantor-Bernstein theorem. Prerequisite: 80:160 or 80:165 or 80:169.

80:183(g). Mathematical Logic II — 4 hrs.

Semantics of the predicate calculus. Gödel's completeness theorem for first order theories. Completeness, categoricity and decidability. Some decidable mathematical theories and the method of elimination of quantifiers. Prerequisite: 80:169.

80:184(g). Introduction to Automata Theory — 4 hrs.

Finite automata. Neural networks and memories in finite state machines. Infinite automata. Algorithms, computability and infinite-state machines. Turing machines, decision problems for finite and infinite machines. Introduction to formal languages. Prerequisite: either 81:070 or 80:169; and 80:061 or consent of instructor.

80:187(g). Formal Languages — 3 hrs.

Natural languages and formal languages. Grammars and their generated languages. Finite and infinite machines and their relations to formal languages. Operations on languages. Some unsolvable and solvable problems. Prerequisite: 80:184.

80:188(g). Modal Logic — 3 hrs.

The syntax and semantics of several modal propositional and predicate logics. Consistency, completeness, and decidability questions. Prerequisite: 80:169.

80:189(g). Geometric Transformations — 4 hrs.

Rigid and similarity transformations in the Euclidean plane and Euclidean space. Groups, subgroups and normal subgroups of transformations. Symmetry groups, the Pólya-Burnside theorems and applications to crystallography and design. Groups and the foundations of geometry. Prerequisite or corequisite: 80:165 and 80:160.

80:190. The Teaching of Secondary Mathematics — 3 hrs.

Teaching strategies for grades 7-12; roles of mathematics content and learning psychology in the secondary teaching situation. Prerequisites: 20:018; 20:040; 25:050; and 80:060.

80:191(g). Contemporary Mathematics Curricula — 2 hrs.

Study and evaluation of current mathematics (K-12) projects, manipulative materials, textbooks, games, individualized programs, computer software, and commercial tests. Students may select any level (K-12) in which to evaluate materials and develop projects. Prerequisite: 80:190 or 80:134.

80:192. Diagnosis and Remediation in Mathematics — 2 hrs.

Diagnostic and remediation concepts and techniques in mathematics. May be repeated once for credit in a different area with departmental approval. Prerequisite: 80:134 or 80:190 or consent of instructor.

80:197(g). Systems of Geometry — 3 hrs.

Projective, affine, and elliptic geometries. Historical background, axiomatic development, and the establishment of consistency theorems through the construction of analytic and synthetic models within the real number system and other geometric systems. Prerequisite: 80:165.

80:198. Independent Study.

80:201. Mathematical Analysis I — 3 hrs.

The real numbers. Topology of Cartesian spaces. Continuous functions. Differentiation in Cartesian spaces. Prerequisite: 80:140 or consent of instructor.

80:202. Mathematical Analysis II — 3 hrs.

Riemann-Stieltjes and Lebesgue Integral. Integration in Cartesian spaces. Improper and infinite integrals. Infinite series. Prerequisite: 80:201.

80:203. Complex Analysis I — 3 hrs.

Analyticity. Differentiation and integration of functions of one complex variable. Power series, Laurent series. Calculus of residues. Prerequisite: 80:140 or consent of instructor.

80:204. Complex Analysis II — 3 hrs.

Analytic continuation. Harmonic functions. Entire functions. Conformal mapping. Selected applications. Prerequisite: 80:203.

80:205. Topics in Analysis — 3 hrs.

Selected topics in Mathematical Analysis: Measure and integration theory. Introduction to functional analysis. Zeros of polynomials. Differential equations in the complex domain. Prerequisites: 80:201 or 80:203; and consent of instructor. May be repeated for credit with consent of instructor.

80:210. Theory of Numbers — 3 hrs.

Basic interrelationships of the system of integers.

80:235. Problems in Teaching Elementary School Mathematics — 2 hrs.

Course content usually generated by participants. Typical topics: problems dealing with: individualizing instruction, assessing growth, major concepts and skills in the elementary mathematics program. Prerequisite: departmental approval.

80:236. Advanced Foundations of Arithmetic — 3 hrs.

Formal study of the development and structure of arithmetic. Topics from statistics, probability and problem solving at levels appropriate to elementary and middle school mathematics also included.

80:245. Topics in Abstract Algebra — 3 hrs.

Topics from groups, rings and ideals, fields. Galois theory, introduction to homological algebra, infinite Abelian groups and linear algebras. Prerequisite: 80:160.

80:266. Topics in Geometry — 3 hrs.

Topics from: general theory of magnitudes; content and measure in geometry; the Banach-Tarski paradox; geometric dissection theory; packing and tiling; combinatorial geometry; geometric inequalities; descriptive geometry. Prerequisite: 80:165. May be repeated with consent of instructor.

80:267. Topics in Topology — 3 hrs.

Selections from general topology; uniform spaces, topological groups and algebras, rings of continuous functions, topological vector spaces. Prerequisite: 80:167.

80:273. Topics in Probability and Statistics — 3 hrs.

Topics chosen from correlation and regression analysis, analysis of variance and co-variance, non-parametric methods, order statistics. Prerequisite: 80:175 or equivalent. May be repeated for credit.

80:278. Topics in Mathematical Logic — 3 hrs.

Topics from: algebraic logic, topological logic, intuitionistic logic, the theory of definability, many-valued logic, the logic of infinitely long formulas, theories of computability and decidability, and decision procedures in formal mathematical theories. Prerequisite: 80:169. May be repeated for credit.

80:280. Curricula in Elementary School Mathematics — 3 hrs.

Experimental and current curricula; purpose, organization and design considered with methods of implementing curricular change.

80:281. Theories of Learning Elementary School Mathematics — 3 hrs.

Exploration of findings of selected learning theories as they apply to both content and pedagogy in the elementary mathematics program.

80:290. Problems in Teaching Junior High School Mathematics — 2 hrs.

Course content decided by participants and instructor. Both mathematics content and methodology of the junior high school considered. Prerequisite: departmental approval. May be repeated once for credit.

80:291. Problems in Teaching High School Mathematics — 2 hrs.

Course content decided by participants and instructor. Both mathematics content and methodology of the senior high school considered. Prerequisite: departmental approval. May be repeated once for credit.

80:292. Teaching Students with Learning Problems in Mathematics — 2 hrs.

Identification, characteristics, and needs of students with learning problems together with coordinated work with appropriate students. Prerequisite: 80:134 or 80:190.

80:295. Teaching Gifted and Talented Students in Mathematics — 2 hrs.

Identification, characteristics, and needs of gifted and talented students in mathematics together with coordinated work with appropriate students. Prerequisite: 80:134 or 80:190.

80:299. Research.

Computer Science

81:025. The Computer in Society — 3 hrs.

Introduces basic computer concepts; survey of available computer equipment; examines current uses of computers in business, education, etc., and their future potential; and study of implications to society. Emphasis on hands-on computer experiences.

81:070. Introduction to Programming — 3 hrs.

An introduction to programming using a problem-oriented language such as FORTRAN; some emphasis on style and program structure.

81:071. Computer Programming — 3 hrs.

The study of algorithms and their implementation using Pascal. Prerequisite: 81:070.

81:102(g). Introduction to Computer Science — 3 hrs.

Study of algorithms as applied to various areas of computer science using advanced features of the FORTRAN and BASIC programming languages. Requires completion of a programming project related to student's major area. Open only to graduate students. Student may not receive credit for both 81:071 and 81:102. Prerequisite: 81:070 or 81:101.

81:110(g). COBOL — 3 hrs.

Basic features of COBOL and report generating languages examined; emphasis on data processing techniques and file concepts. Includes file structures, access methods, file maintenance, sorting, information retrieval, report generation. Concepts illustrated by business-type examples. Prerequisites: 81:070; 81:071.

81:111(g). File Processing — 3 hrs.

Techniques for file creation, updating, accessing, and processing; COBOL used for exercises; includes study of report writer. Business applications stressed. Prerequisite: 81:110.

81:120(g). Assembly Language Programming — 3 hrs.

Introduction to basic computer structures, hardware, and machine language. Topics: internal representation of characters and numbers, conversion techniques, addressing concepts, subroutine linkages, macro-language, and I/O operations. Prerequisite: 81:071 or 81:102.

81:130(g). Data and File Structures — 3 hrs.

Basic methods of representation and organization of information by logical structures such as vectors, trees, strings, and graphs, and their realization as data structures in memory or file structures on discs, tapes, and other devices. Examination of algorithms and programs for manipulating these structures with emphasis on applications. Prerequisite: 81:071 or 81:102.

81:135(g). Programming Languages — 3 hrs.

Study of the run-time behavior of programs, control structures, data types and structures, and primitive operations of programming languages. Several languages used to illustrate concepts. Prerequisite: 81:130.

81:140(g). Computer System Structures — 3 hrs.

Functions, issues, designs, implementations and uses of computer system elements; emphasis on understanding and use. Includes batch, multi-programming, time sharing, and network systems; file handling and management information systems; process and storage management and handling. Prerequisites: 81:120; 81:130.

81:145(g). Software Design and Development — 3 hrs.

Strategies, methods, and tools for the design, development, implementation, testing and documentation of large programming projects. Case histories examined. Prerequisite: 81:135.

81:150(g). Project Management — 3 hrs.

Examination of problems of organizing, controlling, managing, and evaluating a software project; also includes software metrics and human input. Prerequisite: 81:111 or 81:145 or consent of instructor.

81:155(g). Compiler Design — 3 hrs.

Introduction to the analysis of programming languages and construction of translators. Prerequisite: 81:135.

81:160(g). Operating Systems — 3 hrs.

Design and implementation of operating systems in a microcomputer environment. Emphasis on I/O systems, communications, and information management. Prerequisite: 81:140.

81:178(g). Topics in Computer Science — 3 hrs.

Topics of immediate interest from general area of Computer Science; may include systems, data management, artificial intelligence, computer assisted instruction, programming languages. May be repeated once for credit on a different topic for a maximum of 6 hours. Prerequisite: consent of instructor.

81:179. Cooperative Education — 1-4 hrs.

Application of classroom learning to field experience. Credit may not be applied to major or minor. Available only on *credit/no-credit* basis.

Military Science

Lawson, Head. K. Anderson, Fox.

The Department of Military Science administers the Army Reserve Officers' Training Corps (AROTC) programs at the University of Northern Iowa. Credit earned in the department counts as general elective credit toward baccalaureate degree requirements.

The ROTC **Basic Course** is designed for freshman and sophomore students. One three-hour course and three one-hour courses are offered and provide basic knowledge about the military and its role in society as well as a review of basic principles of military strategy, tactics, and elementary skills. The **Basic Course** is open to all students and there is no military obligation.

Students who have not been able to participate in the full two-year Basic Course because of time limitations, but wish to enter the ROTC **Advanced** program, may qualify by taking a four-hour compression course.

The **Advanced Course**, or final four semesters of the program, require that a student take four 3-hour courses and attend a six-week advanced camp during the summer between the junior and senior years. Entry into the **Advanced Course** is competitive and entails a commitment to serve a minimum of three years as an Army officer. The course work is designed to provide a preparation for the duties and responsibilities of a commissioned officer and to address the dynamics of organizational leadership from the small-group level to large and diversified organizations. A university course in modern history and one in the social sciences are also required. Students in the Advanced program receive a subsistence allowance of \$100 per month and are also eligible to compete for three, two, and one-year ROTC scholarships.

Students who successfully complete the Advanced Course receive a commission as a second lieutenant in the U.S. Army and serve either on active duty or with the Army National Guard or the U.S. Army Reserve.

Although the AROTC curriculum normally spans four years, it can be completed in as few as two years by qualified students with departmental approval.

Field Training — Prior to commissioning, all cadets must attend a six-week, paid, advanced training camp at Fort Lewis, Washington. This training takes place between the student's junior and senior years. Selected students may also participate in active Army training programs such as Ranger, Air Assault, Northern Warfare, and Airborne.

Advanced Placement — Students with prior military training or experience can receive full credit toward commissioning (not graduation) for the first two years of AROTC and are not required to attend field training prior to entering the program. They must, however, complete the advanced training camp prior to commissioning.

Basic Camp — Prerequisite requirements for the Advanced Course may be met by students without prior military training or experience through successful completion of the six-week ROTC basic camp at Fort Knox, Kentucky, during the summer. Students are paid approximately \$650.00 plus travel expenses for this training and they can also apply for a two-year ROTC scholarship. Attendance at this camp carries no military obligation.

Financial Assistance — AROTC scholarships providing tuition, books, laboratory fees, and a tax-free allowance of \$100 per month are available for four, three, two, and one-year periods. Scholarship recipients who complete the program are required to serve on active duty for a period of four years.

All cadets in the last two years of AROTC receive \$100 per month as a tax-free allowance. Students attending field training are paid while there and receive travel expenses. Uniforms and books for all classes taught by Military Science Department are furnished and a tax-free uniform allowance is provided for all commissionees.

Veterans continue to draw any GI Bill benefits to which they are entitled. Non-scholarship **Advanced Course** students also may participate in the Simultaneous Membership Program (SMP) with the U.S. Army Reserve or National Guard. SMP cadets earn approximately \$2,500.00 as ROTC Cadets and officer-trainees in National Guard and Army Reserve units in the local area.

Educational Delay — Cadets may request an educational delay to postpone entry into the service on active duty until after completion of an advanced degree or professional training program.

Basic Course

08:091 Introduction to the Military (MS I) — 1 hr.

The role of the military in American society and as an element of American foreign policy; includes basic history of the military establishment, organization of the Department of Defense, current defense strategy, and an introduction to leadership and management models.

08:092. Foundations of Military Organizations (MS I) — 1 hr.

The basic organization of the military services with emphasis on U.S. Army, division level and above; missions and capabilities; plus outline of Army branches, officer and non-commissioned officer duties and responsibilities; continuation of 08:091.

08:093. Military Strategy and Tactics (MS I) — 3 hrs.

Analysis of historic military battles; includes individual/group project in detailed applications of tactical concepts; leadership techniques of the "Great Captains."

08:094. Tactical Military Analysis (MS II) — 1 hr.

Small unit tactics and military leadership responsibilities with emphasis on individual and squad-level tactics; includes topographical maps and land navigation study plus leadership of small groups.

08:099. Fundamentals of Military Organization and Operation (Compression Course) — 4 hrs.

Advanced Course

08:116. Small Group Leadership (MS III) — 3 hrs.

Organizational leadership with emphasis on unit goals and standards, performance motivation, delegation of authority, and training; includes preparation for and conduct of student-led classes in designated subject areas. Prerequisite: completion of Basic Course.

08:117. Principles of Military Operations (MS III) — 3 hrs.

Fundamentals of military planning and preparation of operations orders for small units; examines organization, functioning, and communications of an infantry company in a tactical environment, includes: defensive, offensive, retrograde, air assault, and fire support operations. Will include a two-day field training exercise. Prerequisite: completion of Basic Course.

08:118. Military Management and Law (MS IV) — 3 hrs.

Leadership and management of large organizations with emphasis on effective management of resources and organizational behavior problems; includes military law and the military justice system, requirements of a profession, and necessity of professional ethics. Prerequisite: completion of Basic Course.

08:119. Administrative Management (MS IV) — 3 hrs.

Comprehensive review of leadership and management models presented in Basic Course; administrative, logistics, and management duties of junior officers highlighted; emphasis on final preparation for commissioning and current problems in the military and American society. Prerequisite: completion of Basic Course.

08:189. Readings in Contemporary Military Issues — 1-6 hrs.

08:192. Military Science Leadership Practicum — 4-6 hrs.

A six-week summer program at Fort Lewis, Washington, designed to provide leadership development opportunities for students participating in the ROTC Advanced Program. Prerequisite: completion of 08:116 and 08:117, with departmental permission. Students who have completed only 08:116 or 08:117 may attend with permission of the professor of military science.

Modern Languages

Konig, Head, Bubser, Dubois, Fagle, Febles, Franco, Hawley, Hon-eycutt, Jamosky, Koppenssteiner, Munoz, Nodarse, M. Oates, Odwarka, Parker, J. Schwartz, N. Vernon, Walther, Zucker.

Note: Major programs available include French, German, Spanish, and the Modern Languages Subject Field for the Middle School/Junior High School Major. Minors include French, German, Russian, and Spanish. Courses are offered in all of the above languages.

Three interdepartmental programs are offered cooperatively with the Department of English Language and Literature and are listed on pages 79 and 80. These programs are TESOL/Modern Language Major — Teaching, English and Modern Language Combined Major, and the Comparative Literature Minor.

A student who has previously been enrolled in the foreign languages at this institution will be advised by his or her instructor as to the sequence of succeeding courses.

A student who has never had the foreign language should enroll in the Elementary I course.

The previous background and facility in acquiring basic skills of the individual student may necessitate taking additional work in lower division courses which are not specified in the major.

The total program hours will depend on the student's background and will vary from 23 to 43 hours.

Certification to teach a modern language in elementary school can be achieved by majoring in Elementary Education and taking the Teaching minor in the relevant language.

French Major — Teaching

Required: a minimum of 33 semester hours as follows: 70:190; and a minimum of 30 semester hours in French in courses more advanced than 72:002, including 72:072 and 72:101, of which at least 20 hours must be in courses numbered 100 or higher and including at least one course from each of the following groups:

- a. 72:124; 72:125
- b. 72:108; 72:180; 72:185
- c. 72:114; 72:118; 72:128; 72:131; 72:135; 72:144; 72:146

French Major

Required: minimum of 30 semester hours in French in courses more advanced than 72:002, including 72:072 and 72:101, of which at least 20 hours must be in courses numbered 100 or higher, and including at least one course from each of the following groups:

- a. 72:124; 72:125
- b. 72:108; 72:180; 72:185
- c. 72:114; 72:118; 72:128; 72:131; 72:135; 72:144; 72:146

French Minor — Teaching

Required: 70:190; 72:101 6 hours
Required: 16 hours in French in courses more advanced than 72:002 16 hours
22 hours

French Minor

Required: 72:101 or 72:103 3 hours
Required: 16 hours in French in courses more advanced than 72:002 16 hours
19 hours

German Major — Teaching

Required: a minimum of 33 semester hours as follows: 70:190; and a minimum of 30 semester hours in German in courses more advanced than 74:002, including 74:071, 74:101, 74:161 (for non-native speakers of German only), of which at least 20 hours are in courses numbered 100 or higher, and including at least one course from each of the following groups:

- a. 74:123; 74:150
- b. 74:107; 74:160; 74:180; 74:185
- c. 74:105; 74:114; 74:116; 74:127; 74:128; 74:143; 74:147

German Major

Required: minimum of 30 semester hours in German in courses more advanced than 74:002, including 74:071, 74:101, 74:161 (only for non-native speakers of German), of which at least 20 hours must be in courses numbered 100 or higher, and including at least one course from each of the following groups:

- a. 74:123; 74:150
- b. 74:107; 74:160; 74:180; 74:185
- c. 74:105; 74:114; 74:116; 74:127; 74:128; 74:143; 74:147

German Minor — Teaching

Required: 70:190; 74:101 6 hours
Required: 16 hours in German in courses more advanced than 74:002 16 hours
22 hours

German Minor

Required: 74:101	3 hours
Required: 16 hours in German in courses more advanced than 74:002	16 hours
	19 hours

Russian Minor – Teaching

Required: 70:190	3 hours
Required: 13 hours in Russian in courses more advanced than 77:002	13 hours
	16 hours

This minor is particularly useful for majors in another foreign language.

Russian Minor

Required: 16 hours in courses in Russian more advanced than 77:002	16 hours
--	----------

This minor is particularly useful for majors in another foreign language.

Spanish Major – Teaching

Required: a minimum of 33 semester hours as follows: 70:190; and a minimum of 30 semester hours in Spanish in courses more advanced than 78:002, including 78:071, 78:072, and 78:101, of which at least 20 hours must be in courses numbered 100 or higher, and including at least one course from each of the following groups:

- a. 78:123; 78:140; 78:152
- b. 78:107, 78:180; 78:185; 78:195
- c. 78:105; 78:112; 78:118; 78:130; 78:134; 78:139; 78:142; 78:144

Spanish Major

Required: minimum of 30 semester hours in Spanish in courses more advanced than 78:002, including 78:071, 78:072, 78:101, of which at least 20 hours must be in courses numbered 100 or higher, and including at least one course from each of the following groups:

- a. 78:123; 78:140; 78:152
- b. 78:107; 78:180; 78:185; 78:195
- c. 78:105; 78:112; 78:118; 78:130; 78:134; 78:139; 78:142; 78:144

Spanish Minor – Teaching

Required: 70:190; 78:101	6 hours
Required: 16 hours in Spanish in courses more advanced than 78:002	16 hours
	22 hours

Spanish Minor

Required: 78:101	3 hours
Required: 16 hours in Spanish in courses more advanced than 78:002	16 hours
	19 hours

Modern Language Subject Field – Middle School/Junior High School Education Major****French —**

Required: 70:190	3 hours
Required: 72:051 and 72:061	5 hours
Required: 72:072; 72:101; 72:103* or 72:124 or 72:125; plus electives	16 hours
	24 hours

*If 72:103 is elected, the student is strongly advised to take one of the two courses in French Civilization.

German —

Required: 70:190	3 hours
Required: 74:011	5 hours
Required: 74:052 and 74:062	5 hours
Required: 74:101; 74:123; 74:103 or 74:107; plus electives	11 hours
	24 hours

Spanish —

Required: 70:190	3 hours
Required: 78:051 and 78:061; 78:052 and 78:062	10 hours
Required: 78:101; 78:103; 78:123 or 78:140; plus 2-hour course in bilingual pre-practicum or bilingual practicum	11 hours
	24 hours

(**See Department of Curriculum and Instruction, page 68.)

General Foreign Language Courses**70:050. Phonetic Theory and Practice — 1 hr.**

Practical phonetic training. Work in language laboratory required.

70:099. Preparation for Study Abroad — 2 hrs.

For students planning to study and travel abroad. Includes practical, social, geographic, and cultural aspects; some emphasis on contrasting American and foreign cultures. No credit on major or minor in foreign language.

70:105(g). Comparative Stylistics — 3 hrs.

Techniques of comparative literary analysis, emphasizes aesthetic aspects of literature. Taught in English. Prerequisite: reading knowledge of one foreign language.

70:110(g). Comparative Study of Western Literature and Civilization — 3 hrs.

A comparative study of major literary movements and philosophical concepts and their impact on Western culture. A team-teaching approach will be used in order to present literary and cultural areas from different points of view and to show how the different countries, their literatures, languages and cultures are interlinked and how they have influenced one another. 1 hour of credit earned may be counted toward a major in a foreign language. Taught in English.

70:120(g). Western Literatures — 3 hrs.

Study of a limited aspect or genre of European or Latin American literature in English translation. No credit on major or minor in a foreign language.

70:150(g). Perspectives in Bilingualism — 3 hrs.

Elements involved in bilingualism for defining and understanding the various facets of bilingualism in today's world, such as: International Bilingualism, Bilingualism in the United States, Bilingual Education and Opportunities in Bilingualism.

70:180(g). Translation of Literary Texts — 3 hrs.

Theories and techniques of literary translation. Prerequisite: 7x:101 or other advanced composition course in a second language.

70:181(g). Translation Theory — 2-3 hrs.

To be taught in English. Explores, with the help of extant literature, various aspects of translation, such as skills vs. creativity, the relationship between original and translation, modes of translation, and a diachronic overview of the philosophy of translation. Prerequisite: reading knowledge of one foreign language, junior standing and consent of instructor.

70:190(g). The Teaching of Foreign Languages — 2-4 hrs.

Credit also as a course in education for a student whose major is foreign languages. This course ordinarily should precede student teaching. Prerequisite: 72:101 or 74:101 or 78:101.

70:198. Independent Study.

70:230. Advanced Literary Translation — 3 hrs.

Preparing literary translation in English of a representative cross-section of literary genres. Extensive discussion of the practical and theoretical problems involved. Emphasis on creative aspects. Prerequisites: B.A. in one foreign language and 70:180.

French

(See page 112 for programs in French.)

72:001. Elementary French I — 5 hrs.

For beginners.

72:002. Elementary II — 5 hrs.

Continuation of 72:001. Prerequisite: 72:001 or equivalent.

72:011. Intermediate French — 5 hrs.

Provides thorough review of the patterns of French as well as development of vocabulary and emphasis on speaking and writing. Prerequisite: 72:002 or equivalent.

72:051. Intermediate Composition — 2-3 hrs.

Progressive development of writing skill through a sequence of graded exercises on topics related to French civilization, with a review of basic structure. (Combination of credits together with 72:061 may not total more than 5 hours in one semester.) Prerequisite: 72:002 or equivalent; 72:011 or equivalent. Corequisite: 72:061 or other intermediate course with approval of department head.

72:061. Intermediate Conversation — 2-3 hrs.

Develops oral fluency through pattern practice, systematically guided conversations on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. (Combination of credits together with 72:051 may not total more than 5 hours in one semester.) Prerequisite: 72:002 or equivalent; 72:011 or equivalent. Corequisite: 72:051 or other intermediate course with approval of department head.

72:070. Selected French Readings — 3 hrs.

Intensive reading and discussion of extracts from books and magazine articles to develop reading ability through non-literary texts on various subjects of interest to the class, and develop other language skills through discussion. Prerequisites: 72:051 and 72:061, or equivalent.

72:072. Introduction to French Literature — 3 hrs.

Intensive study of great pages from leading writers, with the political and literary history of their time. Application of language skills to basic literary analysis. Prerequisite: 72:051 and 72:061, or equivalent.

72:090. Teaching French in the Elementary Schools — 1 hr.

Techniques and practice in teaching French; includes weekly training experience in the local schools plus class sessions. May be repeated twice for credit. Prerequisite: consent of instructor.

72:091. Bilingual Pre-Practicum — 1-6 hrs.

For the second and third-level student. Work with first-level classes which enables student to reinforce basic language skills through direct participation with first-level students. Only 3 credit hours may be applied to a major or minor in French. Prerequisite: consent of instructor. May be repeated, but not to exceed 6 hours.

72:101(g). Advanced Composition — 3 hrs.

Analysis of the major morphological and syntactical structures of the French language, with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. May be repeated once for credit with approval of instructor. Prerequisite or corequisite: 72:072 or equivalent.

72:103(g). Advanced Conversation — 3 hrs.

Develops and improves oral fluency through free and guided conversation. May be repeated once for credit with approval of instructor. Prerequisites: 72:051 and 72:061 or permission of instructor.

72:105(g). Stylistics — 3 hrs.

An introduction to stylistic analysis. Development of style in composition through study of excerpts from contemporary French works and literary translation into French. Prerequisite or corequisite: 72:101 or equivalent.

72:107(g). Listening and Comprehension — 3 hrs.

Develops and improves ease with which one understands all types of standard speech including taped material, readings, radio and television broadcasts, and movies. Offered only on summer study tour.

72:108(g). Oral Translation — 3 hrs.

May be repeated once for credit. Prerequisite: 72:101 or equivalent.

72:114(g). Short Stories — 3 hrs.

Short stories from Vigny, Merimée, Daudet, Maupassant, Aymé and others. Prerequisite or corequisite: 72:101 or equivalent.

72:118(g). Popular Prose Fiction — 3 hrs.

Novels from V. Hugo, A. Dumas, P. Benoit, Maurois, Daninos, Druon and/or others. Prerequisite or corequisite: 72:101 or equivalent.

72:124(g). Contemporary France — 3 hrs.

A survey of recent developments and a description of the country, its people, customs and way of life, institutions, economy, and art. Prerequisite or corequisite: 72:101 or equivalent. May be repeated once for credit in summer institutes abroad.

72:125(g). French Culture and Civilization — 3 hrs.

Includes historical, cultural and sociological background for the understanding of contemporary France. May be repeated in summer institutes abroad for 2 hrs. credit. Prerequisite: 72:101 or equivalent.

72:128(g). Literature of Ideas — 3 hrs.

Montaigne, Pascal, La Rochefoucauld, Saint Simon, La Bruyère, Montesquieu, Voltaire, Chateaubriand, Rousseau, de Tocqueville and their modern successors. Prerequisite or corequisite: 72:101 or equivalent.

72:131(g). The Comedy from Molière to 1890 — 3 hrs.

Plays from Molière, Marivaux, Beaumarchais, Musset, Labiche. Prerequisite or corequisite: 72:101 or equivalent.

72:135(g). Poetry and Verse Drama — 3 hrs.

Representative poems selected for their enduring appeal with classical and romantic dramas from Corneille, Racine, Victor Hugo, Rostand. Prerequisite or corequisite: 72:101 or equivalent.

72:144(g). Novels of the 19th and 20th Centuries — 3 hrs.

Novels from Balzac, Stendhal, Flaubert, Proust, Robbe-Grillet and others. Prerequisite or corequisite: 72:101 or equivalent.

72:146(g). The Drama since 1890 — 3 hrs.

Plays from Romain, Pagnol, Claudel, Giraudoux, Anouilh, Sartre, Beckett, and others. Prerequisite or corequisite: 72:101 or equivalent.

72:160(g). Advanced Oral Practice — 2-4 hrs.

Development of oral fluency and greater accuracy through structured oral exercises; free conversation dealing with civilization and topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participants. Prerequisite or corequisite: 72:101 or equivalent.

72:161(g). Problems in French Pronunciation — 2 hrs.

Correction of and practice in producing French sounds, intonation rhythm and stress to minimize foreign accent. Prerequisites: 72:051 and 72:061, or equivalent.

72:180(g). Applied Linguistics: French — 3 hrs.

Basic linguistic concepts applied to learning the French language. Prerequisite: 72:101 or equivalent.

72:185(g). Written Translation — 3 hrs.

Fundamentals of written translation using varied text materials (public media, scholarly, professional and literary texts), from English to French and French to English. May be repeated once for credit. Prerequisite: 72:101 or equivalent.

72:191. Bilingual Practicum — 1-3 hrs.

Participation in lower-level class activities to acquire first-hand knowledge of methodology involved. Participants meet on regular basis with instructor to discuss, in French, their experiences; reinforces and expands conversational command of the language. May be repeated, but not to exceed 3 hours. Prerequisites: 72:091 and consent of instructor.

72:201. Advanced Composition and Stylistics — 3 hrs.

Study of stylistic devices; examination of principal morphological, syntactical and semantic problems.

72:203. Structure of French — 3 hrs.

Phonology, morphology, and syntax of current French. Stress is placed on areas of French structure which cause problems for native speakers of English.

72:205. Explication of Text — 3 hrs.

Analysis of the content and style of literary selections studied in depth and used as models for guided composition.

72:207. Contemporary French Speech — 2 hrs.

Understanding and identifying major levels of spoken French, including elegant, standard and familiar speech styles; structural, lexical, and phonological study of current French speech, stressing areas of socio-linguistic importance.

72:220. Oral Translation Techniques — 2 hrs.

Techniques of oral translation including simultaneous interpretation.

72:225. Written Translation Techniques — 3 hrs.

Techniques of written translation emphasizing critical analysis.

72:231. Medieval Literature — 2 hrs.

History and civilization of the Middle Ages from 842 to 1515. Selections from medieval French in modern French translation.

72:270. French Literature in Review — 3 hrs.

Chronological review of major periods, works, and writers of French literature through reading and discussion. Focus on the development of each literary genre. Primarily for students planning to take M.A. comprehensives in French. Prerequisite: graduate standing or approval of instructor.

72:281. Seminar — 2 hrs.

Various topics will be offered such as Medieval Literature, 16th Century Literature, 19th Century, Prose, Contemporary Novel. Specific area to be announced in the Schedule of Classes for current semester. May be taken more than once provided it is on a different topic.

German

(See pages 112-113 for programs in German.)

74:001. Elementary German I — 5 hrs.

For beginners.

74:002. Elementary German II — 5 hrs.

Continuation of 74:001. Prerequisite: 74:001 or equivalent.

74:011. Intermediate German — 5 hrs.

Provides thorough review of essential German grammar, enlarges vocabulary; and augments basic reading, writing, and speaking skills. Prerequisite: 74:002 or equivalent.

74:052. Intermediate Composition — 2-3 hrs.

Prerequisite: 74:011 or equivalent.

74:062. Intermediate Conversation — 2-3 hrs.

Prerequisite: 74:011 or equivalent.

74:070. Perspectives on Modern Germany and Austria — 3 hrs.

Introduction to contemporary German (FRG/GDR) and Austrian culture for the intermediate learner of German. Includes readings on current issues and written, oral, and aural exercises. Prerequisites or corequisites: 74:052 and 74:062 or equivalents.

74:071. Introduction to German Literature — 3 hrs.

Selected major works of representative German authors. Application of language skills to basic literary analysis. Prerequisites: 74:052; 74:062; or equivalent.

74:091. Bilingual Pre-Practicum — 1-6 hrs.

For the second or third-level student. Work with first-level classes which enables student to reinforce basic language skills through direct participation with first-level students. Only 3 credit hours may be applied to a major or minor in German. Prerequisite: consent of instructor. May be repeated but not to exceed 6 hours.

74:101(g). Advanced Composition — 3 hrs.

Analysis of the major morphological and syntactical structures of the German language, with a look at contrasting, grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Prerequisite or corequisite: 74:071 or equivalent. May be repeated once for credit with approval of instructor.

74:102(g). Advanced Composition and Grammar Review — 3 hrs.

Improvement of writing skills through composition, in-class grammar review, and individual tutorial sessions. Prerequisite or corequisite: 74:101 or consent of instructor.

74:103(g). Advanced Conversation — 4 hrs.

Development of oral fluency through systematically guided conversations on civilization topics and free conversation on topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participant. Prerequisite or corequisite: 74:101 or equivalent.

74:105(g). Stylistics — 3 hrs.

An introduction to stylistics analysis. Development of style in composition through study of excerpts from contemporary German works and literary translations into German. Prerequisite: 74:052 or equivalent.

74:107(g). Oral Translation — 3 hrs.

May be repeated once for credit.

74:114(g). German Lyric Poetry — 3 hrs.

Selections from major periods up to the present. Prerequisite or corequisite: 74:101 or equivalent.

74:116(g). Twentieth Century Prose Fiction — 3 hrs.

Prerequisite or corequisite: 74:101 or equivalent.

74:117(g). German Media — 3 hrs.

Provides opportunity to reinforce and expand basic knowledge of the language through reading, writing, and discussing contemporary and realistic issues using German mass media (e.g., newspapers, magazines, radio, television and film). May be repeated once for credit. Prerequisite: 74:101 or equivalent.

74:123(g). Civilization of German-Speaking Countries — 3 hrs.

Advanced-level study of the geography, history and culture of German-speaking countries. Prerequisite or corequisite: 74:101 or equivalent.

74:127(g). German Classicism — 3 hrs.

Prerequisite or corequisite: 74:101 or equivalent.

74:128(g). Literature to Enlightenment — 3 hrs.

German literature from the Beginnings to Enlightenment. Prerequisite or corequisite: 74:101 or equivalent.

74:143(g). Nineteenth Century Literature — 3 hrs.

Representative works from the Romantic Period to Naturalism. Prerequisite or corequisite: 74:101 or equivalent.

74:147(g). Masterpieces of the Modern German Stage — 3 hrs.

Prerequisite or corequisite: 74:101 or equivalent.

74:149(g). Applied Theatre (German) — 1-3 hrs.

Participation in German Theatre.

74:150(g). Contemporary Germany and Austria — 3 hrs.

An in-depth analysis of the political and social developments and cultural trends of postwar Germany (FRG/GDR) and Austria. Prerequisite or corequisite: 74:101 or equivalent.

74:160(g). History of the German Language — 3 hrs.

An introduction to the historical development of German. Prerequisite or corequisite: 74:101 or equivalent.

74:161. Problems in German Pronunciation — 1-2 hrs.

Practice in spoken German for non-native speakers of German. Prerequisites: 74:052 and 74:062; or equivalent.

74:180(g). Applied Linguistics: German — 3 hrs.

Basic linguistic concepts applied to learning the German language. Prerequisite or corequisite: 74:101 or equivalent.

74:185(g). Written Translation — 3 hrs.

Fundamentals of written translation using varied text materials (public media, scholarly, professional and literary texts), from English to German and German to English. May be repeated once for credit. Prerequisite: 74:101 or equivalent.

74:191. Bilingual Practicum — 1-3 hrs.

Participation in lower-level class activities to acquire first-hand knowledge of methodology involved. Participants meet on regular basis with instructor to discuss, in German, their experiences; reinforces and expands conversational command of the language. May be repeated, but not to exceed 3 hours. Prerequisite: 74:091 and consent of instructor.

74:201. Composition and Stylistics — 3 hrs.

Study of stylistic devices; examination of principal morphological, syntactical, and semantic problems. May be offered for 4 hours on the summer study abroad program.

74:203. Structure of German — 3 hrs.

Diachronic and synchronic description of Modern High German phonology, morphology, and syntax.

74:220. Oral Translation Techniques — 2 hrs.

Techniques in oral translation including simultaneous interpretation.

74:225. Written Translation Techniques — 3 hrs.

Techniques of written translation emphasizing critical analysis.

74:250. German Literature in Review — 3 hrs.

Major periods of German literature, literary genres, and techniques; primarily for students who plan to take the M.A. comprehensives in German. Prerequisite: consent of instructor.

74:280. Seminar — 3 hrs.

Various topics will be offered such as Baroque Poetry, Classical Drama, Contemporary Prose Fiction, East German Literature. Specific area to be announced in Schedule of Classes for current semester. May be repeated for credit, except when topic is identical.

Russian

(See page 113 for programs in Russian.)

77:001. Elementary Russian I — 5 hrs.

For beginners.

77:002. Elementary Russian II — 5 hrs.

Prerequisite: 77:001 or equivalent.

77:011. Intermediate Russian — 4-5 hrs.

Progressive development of writing skills through a sequence of exercises on topics related to Russian civilization, with a review of basic Russian language structure.

77:052. Composition — 2 hrs.

Continuation of 77:011, leading to free composition. Prerequisite: 77:011 or equivalent; corequisite: 77:062 or other intermediate course with approval of department head.

77:062. Conversation — 3 hrs.

Like 77:011, with a wider range of subjects, vocabulary and structures. Prerequisite: 77:011; corequisite: 77:052 or other intermediate course with approval of department head.

77:091. Bilingual Pre-Practicum — 1-6 hrs.

For second and third-level student. Work with first-level classes which enables student to reinforce basic language skills through direct participation with first-level students. Prerequisite: consent of instructor. May be repeated, but not to exceed 6 hours. Only 3 credit hours can be applied to a minor in Russian.

77:101(g). Advanced Grammar and Composition — 3 hrs.

Analysis of the major morphological and syntactical structures of the Russian Language, with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Prerequisites: 77:052 and 77:062 or equivalent.

77:102(g). Introduction to Russian Literature — 3 hrs.

Selected major works of representative Russian authors from the beginning to the present, with the political and literary history of their time. Application of language skills to basic literary analysis will be a primary goal. Prerequisites or corequisites: 77:052 and 77:062 or equivalent.

77:131(g). Russian Poetry — 3 hrs.

The leading Russian poets from Pushkin to the present time, with a preliminary study of Russian versification and early lyric poetry. The Golden Age of Poetry and leading nineteenth and twentieth century poets. Special attention will be given to works of Tyutchev, Fet, Nekrasov, Grigoriev, Balmont, Bryusov, Blok, Mayakovsky, Esenin, Pasternak.

77:132(g). The Nineteenth Century Russian Novel — 3 hrs.

The development and evolution of the novel in nineteenth century Russian literature. Concentration will be on the short novels of Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy and Chekhov. Selections from some of the significant longer novels of Tolstoy and Dostoevsky will also be included.

77:134(g). Contemporary Soviet Literature — 3 hrs.

Soviet literature from the year 1956, generally known as the year of the protest, to the present time. The significance of writing during this time, the changes from previous periods and factors affecting the output of Soviet writers, with emphasis on the "protest literature" and the appearance of the younger generation of poets.

77:141(g). Soviet Civilization — 3 hrs.

The culture of the Soviet Union as shaped by its geography, history and pre-history, and as revealed in its arts, sports, customs, traditions and economic, social and political institutions.

Spanish

(See page 113 for programs in Spanish.)

78:001. Elementary Spanish I — 5 hrs.

For beginners.

78:002. Elementary Spanish II — 5 hrs.

Continuation of 78:001. Prerequisite: 78:001 or equivalent.

78:051. Composition I — 2 hrs.

Progressive development of writing skill through a sequence of exercises on topics related to Hispanic civilization, with a review of basic structure. Prerequisite: 78:002 or equivalent; corequisite: 78:061 or other intermediate course with approval of department head.

78:052. Composition II — 2 hrs.

Continuation of 78:051, leading to free composition. Prerequisite: 78:051 or equivalent; corequisite: 78:062 or other intermediate course with approval of department head.

78:061. Conversation I — 3 hrs.

Develops oral fluency through pattern practice, systematically guided conversations on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. Prerequisite: 78:002 or equivalent; corequisite: 78:051 or other intermediate course with approval of department head.

78:062. Conversation II — 3 hrs.

Continuation of 78:061, with wider range of subjects, vocabulary and structures. Prerequisite: 78:061 or equivalent; corequisite: 78:052 or other intermediate course with approval of the department head.

78:070. Selected Spanish Readings — 3 hrs.

Reading and discussion of contemporary books, magazines, and extracts of subjects of interest to students to develop reading ability through non-literary texts. Prerequisites: 78:052; 78:062; or equivalent.

78:071. Introduction to Spanish Literature — 3 hrs.

Selected major works or representative Spanish authors. Application of language skills to basic literary analysis; includes related elements of Spanish arts and customs. Prerequisites: 78:052; 78:062; or equivalent.

78:072. Introduction to Spanish American Literature — 3 hrs.

Selected works of representative Spanish-American authors; includes related elements of Hispanic arts and customs. Prerequisites: 78:052; 78:062; or equivalent.

78:090. Teaching Spanish in the Elementary School — 1 hr.

Techniques and practice in teaching Spanish at elementary school level; includes weekly teaching experience in local school, plus class sessions. May be repeated twice for credit. Prerequisite: consent of instructor.

78:091. Bilingual Pre-Practicum — 1-6 hrs.

For second and third-level students. Work with first-level classes which enables student to reinforce basic language skills through direct participation with first-level students. Prerequisite: consent of instructor. May be repeated, but not to exceed 6 hours. Only 3 credit hours may be applied to a major or minor in Spanish.

78:101(g). Advanced Composition — 3 hrs.

Analysis of the major morphological and syntactical structures of the Spanish language with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Recommended to be taken with 78:071. Prerequisite: 78:052; 78:062; or equivalent.

78:102(g). Commercial Spanish — 3 hrs.

Vocabulary and format for written correspondence in Spanish with emphasis on commercial vocabulary and idioms. Prerequisite: 78:052 or equivalent.

78:103(g). Advanced Conversation — 4 hrs.

Development of oral fluency through systematically guided conversations on civilization topics and free conversation on topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participant. Prerequisite or corequisite: 78:101 or equivalent.

78:105(g). Stylistics — 3 hrs.

An introduction to stylistic analysis. Development of style in composition through study of excerpts from the contemporary Spanish works and literary translation into Spanish. Prerequisite or corequisites: 78:071 or 78:072; 78:101; or equivalents.

78:107(g). Introduction to Oral Translation — 3 hrs.

May be repeated once for credit. Prerequisite: 78:103 or comparable fluency in Spanish.

78:112(g). Latin American Literature — 3 hrs.

Trends in Latin American Literature and representative authors. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:118(g). Contemporary Spanish Literature — 3 hrs.

Peninsular novel, essay and drama since the Generation of '98. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:120. Hispanic Civilization for Business Students — 3 hrs.

An introduction to the civilization, geography, politics, and economics of the Spanish-speaking countries. Emphasis on acquainting students with customs and thought of these countries. Taught in English. Does not count toward a major or minor in Spanish.

78:121(g). Spanish Media — 3 hrs.

Provides opportunity to reinforce and expand basic knowledge of the language through reading, writing, and discussing contemporary and realistic issues using Spanish mass media (e.g., newspapers, magazines, radio, television, and film). May be repeated once for credit. Prerequisite: 78:101 or equivalent.

78:123(g). Spanish Civilization — 3 hrs.

The Spanish cultural heritage as shaped by its geography and history, and as revealed in its arts, sports, customs, traditions and economic, educational, social and political institutions. Prerequisite or corequisite: 78:101 or equivalent.

78:125. Modern Mexico — 3 hrs.

A study of the geographic, socio-economic, historico-political aspects of contemporary Mexico as reflected in its art, folklore, and culture.

78:130(g). Golden Age Literature — 3 hrs.

Outstanding literary works of this period, including prose, drama, and poetry. Prerequisite: 78:071 or 78:072; 78:101; or equivalents.

78:132(g). Golden Age Drama and Lyric — 3 hrs.

Study of the theatre and poetry of the Spanish Renaissance and Baroque eras. Intensive reading of selected comedies of Lope de Vega, Tirso de Molina, and Calderón, and the poetry of Garcilaso de la Vega, Góngora, Quevedo, Fray Luis de León, and San Juan de la Cruz. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:134(g). Nineteenth Century Spanish Literature — 3 hrs.

Study of Romanticism, Realism, and Naturalism. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:139(g). Theatre — 3 hrs.

Peninsular and Latin American theatre from its origin to the present. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:140(g). Latin American Civilization — 3 hrs.

The culture of Latin America as shaped by its geography, history, and pre-history, and as revealed in its arts, sports, customs, traditions and economic, social and political institutions. Prerequisite or corequisite: 78:101 or equivalent.

78:142(g). The Latin American Novel — 3 hrs.

The twentieth century will be stressed. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:144(g). Hispanic Poetry — 3 hrs.

Modernism and Post-Modernism will be stressed. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:149(g). Applied Theatre: Spanish — 1-3 hrs.

Participation in Spanish theatre. Prerequisite: 78:101 or equivalent; and consent of instructor.

78:150(g). Written Communication — 3 hrs.

Topics taken from daily life; compositions written and corrected in the classroom, grammar review, and Spanish letter writing. Offered only in conjunction with the Spanish institutes abroad.

78:151(g). Advanced Oral Communication — 3 hrs.

Topics of Spanish daily life; emphasis on idioms typical of that linguistic community. Student to make periodic public surveys to put knowledge to more formal use. Offered only in conjunction with the Spanish institutes abroad.

78:152(g). Contemporary Spanish Culture — 3-5 hrs.

Contemporary Spanish culture as it reflects and relates to its history and pre-history as well as to current environment; emphasis on literature, architecture, painting, sculpture, and folk music. Offered only in conjunction with the Spanish institutes abroad. May be repeated but not to exceed 5 hours.

78:161(g). Problems in Spanish Pronunciation — 2 hrs.

Correction of and practice in producing Spanish phonemes to minimize foreign accent. Prerequisites: 78:052; 78:062; or equivalent.

78:180(g). Applied Linguistics: Spanish — 3 hrs.

Basic linguistic concepts applied to learning the Spanish language. Prerequisites: 78:071 or 78:072; 78:101; or equivalents.

78:185(g). Written Translation — 3 hrs.

Fundamentals of written translation using varied text materials (public media, scholarly, professional, and literary texts), from English to Spanish and Spanish to English. May be repeated once for credit. Prerequisite: 78:101 or other advanced composition course in Spanish.

78:191(g). Bilingual Practicum — 1-3 hrs.

Participation in lower-level class activities to acquire first-hand knowledge of methodology involved. Participants will also meet on regular basis with instructor to discuss, in Spanish, their experiences; reinforces and expands conversational command of the language. Prerequisite: 78:091 or equivalent; and consent of instructor. May be repeated, but not to exceed 3 hours.

78:195(g). Psycholinguistics: Spanish — 3 hrs.

Introduction to field of psycholinguistics and its application to study of a language. Analysis of language from humanistic point of view; students learn to deal more effectively with cross-cultural situations reflected in the language spoken by a given culture. Prerequisite or corequisite: 78:101.

78:201. Spanish Literature in Review — 3 hrs.

Major periods of Spanish literature, literary genres and techniques using intensive readings, lectures, and student reports. Primarily for students planning to take the M.A. Spanish comprehensives.

78:203. Structure of Spanish — 3 hrs.

A study of the phonology, morphology and syntax of current Spanish. The sound system and grammatical construction of Spanish discussed in the light of modern linguistic procedures.

78:205. Analysis of Spanish — 3 hrs.

Systematic study of Spanish language, from logical, psychological and grammatical points of view.

78:220. Oral Translation — 3 hrs.

Techniques of simultaneous translation. Prerequisite: 78:107 or comparable translation skills.

78:225. Written Translation — 3 hrs.

Techniques of written translation with emphasis on critical analysis and the translation of technical language. Prerequisite: 78:185 or comparable translation skills.

78:231. Cervantes — 3 hrs.

Intensive study of *Don Quijote*.

78:232. Old Spanish — 2 hrs.

A literary and linguistic study of the *Poema de Mio Cid* and other selected early works.

78:250. Culture of Castile — 3 hrs.

Old Castile — exploration of the essence of Castilian culture which forms the basis for the contemporary civilization of all Spanish-speaking countries. Offered only in conjunction with the Spanish institutes abroad.

78:282. Seminar — 2 hrs.

Various topics will be offered such as Medieval Prose Fiction, Mexican Novel, Antillean Poetry, Renaissance Drama, Poetry of Federico Garcia Lorca. Specific area to be announced on the Schedule of Classes for current semester. May be repeated except when topic is identical.

Music, School of

Ross, Director. Aibel, Barry, C. Becker, M. Beckman, Bock, Book, Calhoon, Chidester, Cowen, Gault, Graham, Hansen, Hogancamp, Holstad, K. Holvik, M. Holvik, Jenner, Jernigan, D. Johnson, J. Johnson, R. Johnson, Kratzenstein, Matheson, Merrion, Michaelides, Pape, Paxton, Reuss, Ritschel, Shepherd, Smalley, *Tritle, Washut, Wendt, Williams.

*on leave

The School of Music offers majors and minors under three baccalaureate degrees: the Bachelor of Music, the Bachelor of Arts, and the Bachelor of Fine Arts. These include:

Bachelor of Music — Music Education Major
Performance Major
Theory-Composition Major

Bachelor of Arts — Music Major
Music Minor — Teaching
Music Minor

Bachelor of Fine Arts — Music Theatre Major

The Music Education major prepares the student for a teaching career and provides certification in music for grades K-12. The Performance and Theory-Composition majors are professional degrees designed to prepare the student for (1) careers as artists-performers, composers, or (2) entrance to graduate schools where further excellence in a performance area might be pursued.

The Music Major under the Bachelor of Arts degree is a liberal arts program for the student interested in combining the discipline of music training with the breadth offered by a liberal arts curriculum.

The Music Theatre major under the Bachelor of Fine Arts degree is an interdisciplinary program combining courses from the School of Music and the Department of Speech. Graduates of this program could qualify for professional careers in music theatre, and upon completion of the requirements for the Music Education major under

the Bachelor of Music degree could qualify for directorial position in the public schools.

Declaration of Major in Music

All students who have been admitted to the School of Music and wish to pursue a music major curriculum should take the following courses during the freshman year:

Freshman music core:

Theory I, II (58:011; 58:012)	6 hours
Aural Training I, II (58:015; 58:016)	2 hours
Exploring Music (52:020)	3 hours
Applied Music (54:0xx; 54:0xx — 2 hrs. each semester) .	4 hours
Ensembles (53:0xx; 53:0xx — 1 hr. each semester)	2 hours

During the second semester of the freshman year, an extensive evaluation of the student will be conducted. A student should petition at that time to enter a specific degree program. Approval of the faculty, undergraduate coordinator in music, and the Director of the School is required before a student is admitted formally to a degree program in music. Transfer students will be admitted conditionally to the department and, after one semester in residence, may be admitted formally to a program of study.

General Requirements for Undergraduate Majors

Music majors on all degree programs must choose an area of applied music (54:xxx) for specialization and must meet the proficiency standards of the School of Music.

Auditions: Admission to the School of Music requires successful completion of an audition in the main performance area.

Piano Proficiency: Required of all majors. All freshmen will enroll in group piano class or applied piano continuously (semester by semester) until piano proficiency has been passed. For Music Education majors, requirements must be completed prior to student teaching.

Voice or Instrumental Proficiency: Required of all music education keyboard majors.

Foreign Language: Ten (10) semester hours of credit in a foreign language are strongly recommended for a student whose applied major or concentration is voice and for all students on the Bachelor of Music Performance and Theory — Composition programs.

Large Organizations: In addition to applied music, all music majors must participate in at least one of the large organizations each semester in which they are enrolled as regular university students. Participation in ensembles does not satisfy the large organization requirement unless exception is made in advance by the Director of the School.

- Wind and Percussion students will elect either band or orchestra, and are required to participate in Marching Band for two semesters.
- String players will elect the orchestra.
- Voice majors will be assigned to an appropriate choral group.
- Keyboard majors will elect a large organization for their participation requirement.

Bachelor of Music Degree Programs

Music Education Major

Required:

Applied music (including 3 hours of 100-level work in major area)	15 hours
Music theory: 58:011; 58:012; 58:013; 58:014; 58:015; 58:016; 58:017; 58:018	16 hours
Analysis of music styles: 58:110	3 hours
Music literature: 59:010; 59:011	6 hours
Basic conducting: 56:020	2 hours
Introduction to music education: 57:050	1 hour
Elementary/general music methods: 57:141	3 hours
Ensembles	6 hours
Plus a Specialization (A or B or C) listed below (see Note for optional specializations)	13 hours
	65 hours

Note: If an optional Specialization (D, E, or F) is chosen, the specialization hours will be 20-23 hours and total requirements for graduation will range from 135 to 138 hours.

Specializations —

A. Choral Specialization:

Required: 56:022; 57:165; 56:030; 57:130	9 hours
Electives from: 56:xxx; 57:1xx; 58:1xx, 59:1xx	4 hours
	13 hours

B. Instrumental Specialization:

Required: 56:021; 57:010; 57:155	11 hours
Electives from: 56:xxx; 57:1xx; 58:1xx, 59:1xx	2 hours
	13 hours

C. Elementary/General Specialization:

Required: 56:021 or 56:022; 57:165 or 57:155	6 hours
Required: 54:049 (students whose applied area is voice will substitute applied piano)*	2 hours
Electives from: 56:030; 56:110; 57:010 (1-3 hrs.); 57:130; 57:143; 57:144; 57:145; 57:190	5 hours
	13 hours

*Applied Voice, 2 hours, satisfies voice proficiency.

Optional Specializations —

D. Composite Specialization (Choral and Instrumental):

Required: 56:021; 56:022; 57:155; 57:165	12 hours
Required: 54:049 (students whose applied area is voice will substitute applied piano)	2 hours
Required: 56:030; 57:130; 57:010 (5 hrs.)	8 hours
	22 hours

E. Jazz Specialization:

Required: 56:021; 57:155; 58:127; 58:128; 59:050 .	13 hours
Required: 57:010	5 hours
Required: 56:152 (1 hour per semester)	3 hours
	21 hours

F. Special Education Certificate:

Required: 22:150; 20:155, 57:190; 57:191; 57:195 .	12 hours
Plus: the required courses from either Specialization A, B, or C for a total of	8-11 hours
	20-23 hours

Additional major requirements:

1. For all Specializations (A-F): senior recital (half recital).
2. For Specialization E only: Two (2) semesters of jazz combo.
3. For Specialization F only: Guitar proficiency.
4. For students whose applied area is voice: 56:030 is required.
5. Keyboard Composite majors must declare either instrumental or vocal emphasis. Instrumental Composite majors will participate in an appropriate choral organization for a minimum of two semesters; voice Composite majors will participate in an appropriate instrumental organization for a minimum of two semesters (one semester of which must be Marching Band).

Recommendation:

Students whose applied area is voice are encouraged to complete 10 semester hours in foreign language.

Performance Major

Areas: Voice, piano, organ, band-orchestral instruments.

Required:

Applied music	28 hours
Music theory: 58:011; 58:012; 58:013; 58:014; 58:015; 58:016; 58:017; 58:018; 58:110 plus electives in theory for a total of	22 hours
Music literature: including 59:010 and 59:011	12 hours
Conducting: 56:020; 56:021; or 56:022	5 hours
Ensembles	6 hours
Electives in music	7 hours
	80 hours

Additional requirements:

1. Junior recital (half recital)
2. Senior recital (full recital)

Recommended: Performance majors are encouraged to complete at least 10 hours in foreign languages.

Theory-Composition Major

Required:

Composition: 58:022; 58:122; 54:054 and 54:154 for a total of	18 hours
Applied Piano (54:046 and/or 54:146) beyond keyboard proficiency	4 hours
Music theory: 58:011; 58:012; 58:013; 58:014; 58:015; 58:016; 58:017; 58:018; 58:110; 58:120; 58:121; and electives in theory for a total of	27 hours
Music literature: including 59:010 and 59:011	12 hours
Conducting: 56:020; 56:021 or 56:022	5 hours
Ensembles	6 hours
Electives in music	8 hours
	80 hours

Additional requirement: Composition recital.

Recommended: Theory-Composition majors are encouraged to complete at least 10 hours in foreign languages.

Bachelor of Arts Degree Programs

Music Major

Required:

Applied music (including at least 4 hours of 100-level work in major area)	16 hours
Music theory: 58:011; 58:012; 58:013; 58:014; 58:015; 58:016; 58:017; 58:018	16 hours
Music literature: 59:010; 59:011	6 hours
Electives in music (100-level courses)	8 hours
	<hr/> 46 hours

Additional requirement: Senior recital (may take the form of a performance, composition, or an essay).

Music Minor — Teaching

Required:

Music Ensembles, 53:xxx	2 hours
Applied Music, 54:xxx	4 hours
Basic Conducting: 56:020	2 hours
Introduction to Music Education, 57:050	1 hour
Elementary/General Music Methods, 57:141	3 hours
Music theory, 58:011; 58:012; 58:015; 58:016	8 hours
Instrumental Emphasis:	
Instrumental Methods/Materials, 57:155 — 3 hrs.	
Instrumental Techniques, 57:010 — 3 hrs.	
or	
General Music/Choral Emphasis:	
Choral Methods/Materials, 57:165 — 3 hrs.	
Music electives, 56:xxx; 57:xxx — 3 hrs.	
	<hr/> 6 hours
	<hr/> 26 hours

(Departmental audition requirements apply to this minor.)

Note: Students on this minor must satisfy Level II of piano proficiency requirements.

Music Minor

Required:

Applied music	4 hours
Music theory (including 58:011; 58:012; 58:015; 58:016)	8-12 hours
Electives in music (preferably in music literature)	4-8 hours
	<hr/> 20 hours

(Departmental audition requirements apply to this minor.)

Audio Recording Technology Minor

Required: 88:018; 88:052; 88:152; 24:155; 56:015; 56:115; 56:179 (Internship)	23 hours
---	----------

Jazz Studies Minor

Required:

Jazz Bands and Combos, 53:x16	6 hours
Applied Music, 54:xxx	4 hours
Instrumental Jazz Improvisation, 56:152	3 hours
Jazz Ensemble Techniques, 56:155	1 hour
Jazz Arranging I - II, 58:127; 58:128	4 hours
Introduction to Jazz History and Styles, 59:050 ..	3 hours
	<hr/> 21 hours

Bachelor of Fine Arts Degree Program

Music Theatre Major

This major is an interdisciplinary program involving the School of Music and Speech-Theatre of the Department of Communication and Theatre Arts.

Music

Required:

Applied music	16 hours
Music theory: 58:011; 58:012; 58:013; 58:015; 58:016; 58:017	12 hours
Music literature: 59:010; 59:011	6 hours
Conducting: 56:020	2 hours
Music Theatre and Opera Theatre: 56:130 or 56:131 ..	4 hours
Ensembles	4 hours
Specialization: at least 9 hours from one of the two areas listed below	9 hours
	<hr/> 53 hours

Areas —

Voice: 56:030; 56:031; 57:130; 59:120; 59:130
Conducting: 56:021 or 56:022; 56:121 or 56:122; 56:198 (Conducting); 59:131; 59:140

Theatre

Required: 50:024; 50:027; 50:050; 50:053; 50:080 15 hours
Required specialization: at least 9 hours from one of the four areas listed below 9 hours
24 hours

Areas —

Acting/Directing: 50:021; 50:022; 50:025; 50:032; 50:052; 50:055; 50:082; 50:147; 50:148; 50:149; 50:152; 50:181; 50:182.
Technical Theatre: 50:010; 50:045; 50:051; 50:110; 50:151; 50:156; 50:157; 50:167; 50:180.
Dance: 42:035; 42:001 (from: Ballet, Modern Dance, Intermediate Ballet, Ballroom Dance, and Rhythm, Jazz and Creative Movement).
Management: 50:077; 50:168; 15:198; 12:198; 13:198; 50:198; 56:198.

Total hours 77 hours

Additional requirements:

1. Keyboard proficiency.
2. Voice proficiency (for keyboard concentration).
3. Recital/Project.

Note: To qualify for certification to teach, see page 119 for certification requirements under the Bachelor of Music degree. Further details may be obtained from the School of Music.

General Courses in Music

52:020. Exploring Music — 3 hrs.

Provides historical background of and emphasizes representative compositions by major composers.

52:102(g). Music in Childhood Education — 2 hrs.

Methods and principles of music in the elementary classroom. Rudiments, aural training, selection and study of materials for listening, rhythmic activities and singing. For non-music majors only.

52:221. Music Research and Bibliography — 2 hrs.

To acquaint student with source materials in music and to help locate thesis topic. Should be taken during first semester in residence by all graduate music students.

52:299. Research.**Music Organizations and Ensembles**

Organization and Ensemble Credit: One (1) semester hour of credit may be earned by a student who completes a semester in an approved ensemble. Ensembles may be repeated for credit. A maximum of two (2) credits for organization and ensemble participation may be earned in any one semester. A maximum of two (2) credits in Jazz Band may be counted by music majors toward departmental ensemble requirement. All music ensembles are open to any university student by audition.

Ensemble numbers are assigned as follows, based on the student's classification:

53:010, 53:110(g). Chorus

(Concert Chorale, University Chorus, Varsity Men's Glee Club, Women's Chorus)

53:012, 53:112(g). Ensemble**53:015, 53:115(g). Band**

(Marching Band, Symphonic Band, Wind Ensemble)

53:016, 53:116(g). Jazz Band**53:017, 53:117(g). Orchestra****Applied Music**

Note: Before registration in Applied Music can be accomplished the student must (1) successfully complete an audition in a main performance area and (2) meet the proficiency standards of the department.

The core of every music major curriculum is the individual lesson. All music majors must enroll in applied music during each semester in residence. Applied music is classified into three categories according to semester-hour credit received:

Major (for Performance majors only)

— 4 semester hours

Concentration (all freshmen during Core requirements and all upperclass and graduate music majors except Performance majors — 2 semester hours)

Secondary — 1 semester hour

Two half-hour lessons each week per semester, are required for both *major* and *concentration* applied students. Practice and performance demands for the *major* are more rigorous than for the *concentration* student.

The amount of credit for Applied Music to be carried will be determined at the time of registration. All students in the freshman music core will enroll for *concentration* applied, 2 semester hours of credit each semester. Applied music taken opposite student teaching earns one (1) hour of credit and two lessons per week will be taken for the nine-week period the student is on campus. With approval, all music students may take applied *secondary* for one (1) semester hour of credit each semester. A one-half hour lesson per week is the requirement for *secondary* credit. Students approved for the Performance major under the Bachelor of Music degree (see under "Declaration of Major," page 118) will register for four (4) semester hours of credit in applied music beginning with the sophomore year. Students approved for the Performance major program under the Master of Music degree will register for four (4) semester hours of credit in

Applied Music during the fall or spring semesters in residence. Adjustments in credit hour registration for Applied Music will be made during the summer session.

The appropriate applied area faculty will determine the level of the student's qualifications (54:0xx, 54:1xx, or 54:2xx) by audition and/or previous work on an instrument or in voice. A 200 number can be assigned only to graduate students on Performance and Composition programs who have satisfactorily completed an audition and are preparing for a graduate major in voice, instrument, or composition. All other graduate applied students will receive 54:1xx(g) credit.

54:Nxx. Applied Music for the Non-Music Major.

Private applied music instruction for students not pursuing a degree program in music. Emphasis on basic skills oriented toward immediate performance needs. Credit normally will not be applied toward music major or minor requirements.

54:030, 54:130(g), 54:230. Flute

54:031, 54:131(g), 54:231. Oboe

54:032, 54:132(g), 54:232. Clarinet

54:033, 54:133(g), 54:233. Bassoon

54:034, 54:134(g), 54:234. Saxophone

54:035, 54:135(g), 54:235. French Horn

54:036, 54:136(g), 54:236. Cornet-Trumpet

54:037, 54:137(g), 54:237. Trombone

54:038, 54:138(g), 54:238. Euphonium

54:039, 54:139(g), 54:239. Tuba

54:040, 54:140(g), 54:240. Percussion

54:041, 54:141(g), 54:241. Violin

54:042, 54:142(g), 54:242. Viola

54:043, 54:143(g), 54:243. Cello

54:044, 54:144(g), 54:244. String Bass

54:045, 54:145(g), 54:245. Harp

54:046, 54:146(g), 54:246. Piano

54:047, 54:147(g), 54:247. Group Piano

54:048, 54:148(g), 54:248. Organ

54:049, 54:149(g), 54:249. Voice

54:050, 54:150(g), 54:250. Harpsichord

54:051, 54:151(g), 54:251. Group Voice

54:052, 54:152(g), 54:252. Guitar

54:054, 54:154(g), 54:254. Composition

(Prerequisite: 58:022 and consent of instructor)

54:129. Instrumental Proficiency — no credit.

Voice or instrumental proficiency required of all music education keyboard majors.

54:P46. Piano Proficiency — no credit.

Required of all undergraduate majors.

54:V49. Voice Proficiency — no credit.

Voice or instrumental proficiency required of all music education keyboard majors.

54:189. Senior Recital — no credit.

Required of all seniors except those on Bachelor of Fine Arts program. Prerequisite: 3 hours at 100 level in major applied area.

Music Techniques

56:015. Basic Recording Techniques — 2 hrs.

Tape recording: theory and practical application. Includes live recording, mixing, editing, overdubbing, sound reinforcement, and tape recorder maintenance. Prerequisite: consent of instructor.

56:020. Basic Conducting — 2 hrs.

Baton Technique, score reading, rehearsal technique, and practice in conducting. Required of all music majors on teaching degree. Prerequisite: 58:012.

56:021. Instrumental Conducting and Materials — 3 hrs.

Advanced training in instrumental conducting with emphasis on orchestral and band scores and literature for small and large ensembles. Required of all instrumental music majors on teaching program. Prerequisites: 56:020; 58:013.

56:022. Choral Conducting and Materials — 3 hrs.

Training in choral conducting, rehearsal techniques, performance practices, and choral materials. Required on the teaching degree for voice majors and those keyboard majors who do not take 56:021. Prerequisites: 56:020; 58:013.

56:030. Diction for Singers I — 1 hr.

Study and application of Italian and English speech sounds for use by singers, coach-accompanists, and teachers of choral music.

56:031. Diction for Singers II — 1 hr.

Study and application of German and French speech sounds for use by singers, coach-accompanists, and teachers of choral music. Prerequisite: 56:030.

56:040. Organ Techniques and Church Service Playing — 1 hr.

Selected problems in church service playing and aspects of organ design. May be repeated for credit.

56:110(g). Guitar in the Classroom — 2 hrs.

For potential teachers of elementary and junior high school music; fundamentals of guitar and basic materials necessary for the effective use of the guitar in the classroom. No previous guitar experience required: basic music background desirable.

56:115(g). Elements of Electronic Music — 2 hrs.

Operation of sound synthesizer and tape recorders, editing of audio tape, and historical background related to the composition of electronic music. Some music background desirable. Prerequisite: junior standing; 56:015 or consent of instructor.

56:121(g). Advanced Instrumental Conducting I — 2 hrs.

Techniques of conducting band and orchestral works; score study and analysis of major works representing all style periods. Classwork includes conducting major works in rehearsal. Prerequisite: 56:021. May be repeated for credit.

56:122(g). Advanced Choral Conducting I — 2 hrs.

Art and techniques of conducting choral and choral-orchestral literature as related to score study of major works from all major style periods. Rehearsal experience includes conducting major works, conducting and coaching recitatives, score reading, problems of baton clarity, and rehearsal pacing. Prerequisite: 56:022. May be repeated for credit.

56:130(g). Music Theatre — 1-2 hrs.

Techniques of the American Music Stage. Includes work in movement, style and history. Preparation of a major music theatre production and/or scenes from musicals or operettas. May be repeated for credit.

56:131(g). Opera Theatre — 1-2 hrs.

Techniques of opera performance. Emphasis on aria, recitative, and ensemble performance; preparation of roles. Study and application of coaching, interpretation, acting, and stage production techniques. Preparation of major operatic production and/or scenes. May be repeated for credit.

56:135(g). Accompanying — 1 hr.

The art of accompanying, both vocal and instrumental literature. Practical experience as accompanist for student soloists in public performance. May be taken twice for credit.

56:152(g). Instrumental Jazz Improvisation — 1 hr.

Elements of improvisation intended as an aid to the experienced instrumentalist and as a tool for the potential instructor. Areas available: Basic, Intermediate, Advanced. Each area may be taken once for credit. Prerequisite: consent of instructor.

56:155. Jazz Ensemble Techniques — 1 hr.

Practical course for future jazz-ensemble director; includes phrasing and articulation, rehearsal techniques, sound reinforcement, and chord terminology. Student will observe and participate in conducting one of the UNI jazz ensembles. Will not count on music education programs.

56:221. Advanced Instrumental Conducting II — 3 hrs.

Continuation of 56:121. Emphasis on laboratory conducting experiences. Preparation for conducting recital. For graduate instrumental conducting majors only. May be repeated for credit. Prerequisite: 56:121 or equivalent, and consent of instructor.

56:222. Advanced Choral Conducting II — 3 hrs.

Continuation of 56:122. Emphasis on laboratory conducting experiences, advanced choral conducting techniques, analysis of representative works, and score reading. Preparation for conducting recital. For graduate choral conducting majors only. May be repeated for credit. Prerequisite: 56:122 or equivalent, and consent of instructor.

Music Education and Methods

56:010. Instrumental Techniques — 1 hr.

Areas: flute, clarinet and saxophone, double reeds, high brass, low brass, high strings, low strings, percussion, harp. One hour credit for each area. Areas may not be repeated for additional credit.

57:050. Introduction to Music Education — 1 hr.

The role of music in the total public school curriculum. Principles of music learning. Required of all music education majors.

57:130(g). Vocal Pedagogy — 2 hrs.

Techniques of diagnosing and discussing vocal problems as related to the singing voice, and a survey of pedagogic materials. Actual teaching experience under supervision. Prerequisite: junior standing music major or above.

57:138(g). Brass Pedagogy — 2 hrs.

Advanced techniques of solving physiological and psychological problems of brass performance. Emphasis on motivation, attitude, stage fright, as well as more traditional topics (i.e., respiration, articulation, embouchure, endurance, and intonation). Prerequisite: junior standing or consent of instructor.

57:141. Elementary/General Music Methods — 3 hrs.

Objectives and materials for and methods of teaching general music in public schools. Emphasis on contemporary approaches. Orff, Kodaly, Dalcroze, Integrated Arts, and other methodologies. Prerequisite: 57:050.

57:143. Music for the Pre-School Child — 2 hrs.

Study of musical perceptions and needs of 3-to-5-year-old children as they respond to music experiences (singing, playing instruments, composing) within various environments (on playground, in a music corner, in a sound-box).

57:144. Introduction to Kodaly and Orff — 2 hrs.

Introduction to teaching techniques, learning environments, and curriculum as developed from the philosophies of Zoltan Kodaly and Carl Orff.

57:145(g). Developments and Trends in Music Education — 2 hrs.

Evolving issues important to the music educator. May be repeated for credit. Prerequisite: 57:050 or consent of instructor.

57:148(g). Piano Methods — 2 hrs.

Procedures and techniques of piano instruction, especially for the beginning and intermediate student. These include the study and techniques of piano playing, the literature of the instrument, and the styles of the various periods.

57:155(g). Instrumental Methods and Materials — 3 hrs.

Teaching of instrumental music in the elementary and secondary schools. Organization and administration of program. Emphasis on band, orchestra, marching band, and jazz ensemble rehearsal techniques and materials.

57:165(g). Choral Methods and Materials — 3 hrs.

Organization and development of public school choral organizations. Emphasis on rehearsal techniques, vocal production and blend, and materials suitable for choral ensembles.

57:170(g). The Suzuki Approach to Teaching Stringed Instruments — 2 hrs.

The philosophy, teaching methods and materials of the violinist Shinichi Suzuki. May be repeated for credit.

57:190(g). Music in Special Education I — 2 hrs.

Development of music teaching techniques appropriate to the needs of special children; information on the implications and requirements of mainstreaming law for music education; assessment of music skills, development of Individualized Educational Programs. Prerequisites: 22:150; 57:141; or consent of instructor.

57:191(g). Music in Special Education II — 2 hrs.

Music materials for special education, assessment, adaptation and development of materials, adaptive equipment. Prerequisite: 57:190 or consent of instructor.

57:195(g). Practicum, Music in Special Education — 2 hrs.

Supervised instruction in the classroom; music skills for special children. Prerequisites: 22:150; 20:151; 57:190.

57:197(g). Instrumental Upkeep and Repair — 2 hrs.

A laboratory course in which practical projects are undertaken. Offered for instrumental majors. To accompany student teaching.

57:220. Psychology of Music — 2 hrs.

The psychological basis of teaching music. May be used to satisfy the special methods elective in the professional core for the master's degree.

57:240. Planning and Supervision — 2 hrs.

For the prospective supervisor of music.

57:250. Projects in Music — 1-3 hrs.

57:255. Band Administration — 2 hrs.

Philosophy, management and public relations techniques and procedures associated with the administration of the elementary and secondary instrumental music programs. Prerequisite: 57:155 or consent of instructor.

57:289. Seminar in General Music — 2 hrs.

The study of practical situations in the general music program with special emphasis on grades one through nine.

57:289. Seminar in Music Education — 3 hrs.

Music Theory

58:011. Theory I — 3 hrs.

Fundamentals of basic musicianship; scales, intervals, chord forms; analysis and writing involving diatonic harmony. Creative use of materials. Corequisite: 58:015.

58:012. Theory II — 3 hrs.

Continuation of 58:011. Corequisite: 58:016.

58:013. Theory III — 3 hrs.

Materials of musicianship; emphasis on the so-called period of "common practice." Corequisite: 58:017.

58:014. Theory IV — 3 hrs.

Continuation of 58:013 with emphasis on Late Romantic and Contemporary eras. Corequisite: 58:018.

58:015. Aural Training I — 1 hr.

58:016. Aural Training II — 1 hr.

58:017. Aural Training III — 1 hr.

58:018. Aural Training IV — 1 hr.

58:022. Composition Class — 3 hrs.

Creative work in the primary forms. Prerequisite: 58:012 or consent of instructor. (For applied composition, see 54:054.)

58:110(g). Analysis of Music Styles — 3 hrs.

Study of forms and procedures prevalent in the works of major composers from the 16th century to the present. Prerequisite: 58:103.

58:120(g). Sixteenth Century Counterpoint — 3 hrs.

The vocal polyphonic style of the 16th century. Analysis. Creative work in vocal forms; motet, madrigal, mass. Prerequisite: 58:013.

58:121(g). Eighteenth Century Counterpoint — 3 hrs.

Contrapuntal technique and instrumental forms of the 18th century. Analysis and creative work in representative forms. Prerequisite: 58:013.

58:122(g). Advanced Composition Class — 3 hrs.

Creative work in the larger forms. Student must complete at least one original project in any of these forms. Prerequisite: 58:022 or consent of instructor.

58:125(g). Instrumentation and Arranging — 2 hrs.

Ranges, transpositions, and functions of all instruments of the band and orchestra and arranging for choir, band, and orchestra. Prerequisite: 58:013.

58:127. Jazz Arranging I — 2 hrs.

Basic skills for jazz composer/arranger. Emphasis on instrument ranges and transposition, chord terminology, voicing and doubling principles, harmonization and chord substitution, form, and score organization. Prerequisite: 58:012 or consent of instructor.

58:128. Jazz Arranging II — 2 hrs.

Continuation of 58:127. Emphasis on contemporary scoring devices, augmented instrumentation (including strings), contrapuntal and formal problems, score study and analysis. Prerequisite: 58:127.

58:130(g). 20th Century Non-Tonal Music — 2 hrs.

Style and structure analysis of representative compositions of the 20th Century with emphasis on the more recently composed works.

58:180. Theory Survey for Graduates — 2 hrs.

Review of theoretical principles and methods of analysis. Required of all graduate students who do not demonstrate adequate proficiency as result of the Graduate Theory Diagnostic Examination.

58:210. Advanced Form and Style Analysis I — 2 hrs.

Application of analytic techniques to music from plainsong through Baroque. Emphasis on era and composer style delineation. Prerequisite: 58:180 or passing score on Graduate Theory Diagnostic Examination.

58:211. Advanced Form and Style Analysis II — 2 hrs.

Continuation of 58:210. Classical period to the present. Prerequisite: 58:180 or passing score on Graduate Theory Diagnostic Examination.

58:225. Advanced Arranging — 2 hrs.

Scoring for orchestra, band, or chorus. Student must complete at least one transcription for a large instrumental or vocal group. Prerequisite: 58:125 or consent of instructor.

Music Literature

59:010. History of Music I — 3 hrs.

Survey of musical trends from all eras. Early Christian era through Bach (1750). Prerequisite: 52:020.

59:011. History of Music II — 3 hrs.

Continuation of 59:010. Classical period to the present. Prerequisite: 52:020.

59:050. Introduction to Jazz History and Styles — 3 hrs.

Evolution of jazz styles and their relationship to the social, economic, and political moods of the period; includes the essential elements of jazz and the influence of jazz on classical and rock music.

59:060. Introduction to Afro-American Music — 3 hrs.

Characteristics of African and Afro-American music. Development of Afro-American music from 1619 to contemporary styles of soul, gospel, jazz, and "art" music. Influence of Afro-American music on contemporary Euro-American music.

59:110(g). Music Literature — Middle Ages and Renaissance — 3 hrs.

Prerequisites: 59:010, 59:011.

59:111(g). Music Literature — Baroque — 3 hrs.

Prerequisite: 59:010, 59:011.

59:112(g). Music Literature — Classic-Romantic — 3 hrs.

Prerequisites: 59:010, 59:011.

59:113(g). Music Literature — 20th Century — 3 hrs.

Prerequisites: 59:010, 59:011.

59:120(g). Performance Literature for _____ — 2 hrs.

Study of music literature available for specific instrument or voice. Combination ensemble-literature course for the performer. Areas available: Brass, Woodwinds, Strings, Organ, Percussion, Piano (I-II), Voice (I-II).

59:130(g). History of Opera — 3 hrs.

Historical development of the opera from its inception (c. 1600) to the present.

59:131(g). History and Literature of Large Choral Forms — 3 hrs.

Development of large choral forms from the Renaissance to the present. Emphasis on the Mass, cantata, oratorio, passion, anthem, and contemporary uses of the chorus.

59:135(g). History of Church Music — 3 hrs.

Church music from the Early Christian Church through the present day.

59:140(g). History and Literature of the Orchestra — 3 hrs.

Orchestral literature from mid-18th Century to present; emphasis on structure of the symphony as a form and the growth of the orchestra as an ensemble.

59:141(g). History and Literature of Chamber Music — 3 hrs.

Music for small ensembles, from Renaissance to present. Emphasis on music by major composers for the traditional combinations: string quartet, trios, sonatas, wind ensembles and miscellaneous ensembles with keyboard.

59:142(g). History and Literature of the Wind Band — 3 hrs.

Growth and development of wind music from Gabrieli to present.

59:150(g). American Music — 3 hrs.

History and literature of our nation's music from 1620 to the present. Prerequisite: 59:011.

59:151(g). Music of World Cultures — 3 hrs.

Study of non-Western music; Africa, Islam, Indian, Indo-China, Indonesia, China, and Japan, and the role of music in these cultures.

59:180. Music Literature Survey for Graduates — 2 hrs.

Review of the various style periods, media and forms in music history of our culture. Required of all graduate students who do not demonstrate adequate proficiency as a result of the Graduate Music History Diagnostic Examination.

59:260. History of Musical Instruments — 3 hrs.

Development of musical instruments from antiquity to the present; includes both western and non-western cultures.

59:285. Readings in Music History — 1-3 hrs.

Prerequisite: consent of Graduate Coordinator in Music.

59:289. Seminar in Music History — 3 hrs.

Musicological research into the various areas of music. May satisfy departmental requirement of 52:221.

Philosophy and Religion

Crownfield, Acting Head. Amend, Hallberg, Ingram, Kachel, D. Morgan, J. Robinson, T. Thompson.

Philosophy Major

Required: three of the following — 65:100; 65:101;

65:103; 65:104 9 hours

Required: 65:119; 65:142; 65:145; 65:150 12 hours

Electives in philosophy (may include 64:139) 15 hours

36 hours

The department recommends that majors in philosophy take as general electives one or more survey courses in religion as a supplement to the program in philosophy.

Religion Major

Required: 64:124 3 hours

Required: three of the following — 64:111; 64:112;

64:114; 64:115; 64:141; 64:142; 64:135 9 hours

Required: two of the following — 64:130; 64:132;

64:134 6 hours

Electives in Religion (may include 65:113; 68:168;

68:194) 18 hours

36 hours

Pre-Theological Emphasis

Students preparing for ministry or for graduate professional education in theology at a seminary or divinity school are advised to consult with the pre-theological adviser, who will assist them in ascertaining the requirements of individual schools and in selecting an undergraduate program best designed for their personal and professional interests.

The Department of Philosophy and Religion, as part of a state university, does not promote any specific religion or point of view, but will provide academic preparation for students from any religious tradition or orientation. The following pre-theological curriculum has been based on the recommendations of the American Association of Theological Schools.

All pre-theological students should take the following courses, whether as a part of the Religion major or as a pre-theological Religion minor:

Required: 64:124; 64:141; 64:142 9 hours

Required: two of the following — 64:111; 64:112; 64:114;

64:115 6 hours

Required: one from each of the following groups —

1) 64:117; 64:121; 64:165 3 hours

2) 64:130; 64:132; 64:134 3 hours

3) 64:126; 64:160; 65:113; 65:152; 65:153 3 hours

24 hours

Pre-theological students majoring in Religion should minor in English, history, psychology, or sociology, or in another field approved by the pre-theological adviser. Students who major in philosophy, English, history, psychology, or sociology should complete the above courses as a pre-theological Religion minor. Other majors may be appropriate for individual interests and vocational plans, and should be selected in consultation with the pre-theological adviser.

To satisfy the general admission requirements of graduate programs, it is recommended that pre-theological students take both 68:021 and 68:022, and laboratory courses in two basic sciences.

Pre-theological students must be fluent in written and spoken English, and should acquire a basic competence in one modern language. If at all possible, they should begin the study of Greek in college.

Students are encouraged to take two (2) semesters of the History of Philosophy sequence: 65:100, 65:101, 65:103, 65:104, preferably including 65:100.

Philosophy and Religion Major

Required: 64:124; 65:145; 65:113 9 hours
Electives* 27 hours
36 hours

*At least six (6) hours shall be in philosophy and at least six (6) hours shall be in religion. The remaining fifteen (15) hours may be in either philosophy or religion courses.

Philosophy Minor

Required: 65:021; 2 courses in history of philosophy series; and 12 hours of electives in philosophy 21 hours

Religion Minor

Required: 64:124; 64:141 or 64:142; and 15 hours of electives in religion, which may include 65:113 21 hours

Philosophy

65:021. Introduction to Philosophy — 3 hrs.

65:100(g). History of Philosophy — Ancient — 3 hrs.

The history of philosophy from the Pre-Socratics to late antiquity, with emphasis on Plato and Aristotle. 65:021 Strongly recommended to precede.

65:101(g). History of Philosophy: Medieval — 3 hrs.

The history of philosophy from late Roman times through the Middle Ages, with emphasis on Augustine and Thomas Aquinas. 65:021 strongly recommended to precede.

65:103(g). History of Philosophy: Renaissance through Enlightenment — 3 hrs.

The history of philosophy from the Renaissance through Hume, with emphasis on continental rationalism and British empiricism. 65:021 strongly recommended to precede.

65:104(g). History of Philosophy — Modern — 3 hrs.

History of philosophy from Kant to the present; emphasis on idealism, romanticism, materialism, positivism, phenomenology, existentialism. 65:021 recommended to precede.

65:105(g). Marxism — 3 hrs.

Basic doctrines of Karl Marx and Frederick Engels and others within Marxist tradition. Dialectical and historical materialism; the Marxist conception of nature and human society; historical and contemporary influence of Marxism on economic and political developments, religion, ethics, science and technology, literature and the arts. Prerequisite: junior standing or consent of instructor.

65:113(g). Philosophy of Religion — 3 hrs.

Introduction to the philosophical examination of religious ideas. Strongly recommended that some work in philosophy or religion precede this course.

65:119. Philosophy of Science — 3 hrs.

Philosophical problems of the sciences; nature of laws and theories, causation, explanation and scientific method, and the relation between the natural and social sciences.

65:142. Ethics — 3 hrs.

A study of the major problems of moral conduct, with emphasis on contemporary ethical theories.

65:143. Aesthetics — 3 hrs.

Problems of experiencing and interpreting the arts presented through readings and discussion of the various arts.

65:145. Logic — 3 hrs.

Methods, principles, and rules of reasoning with emphasis upon their practical uses in effective thinking, scientific inquiry, and verbal communication.

65:150(g). Knowledge and Reality — 3 hrs.

Study of the variety of knowledge-claims about the world and the structures of reality implied.

65:152(g). Existentialism — 3 hrs.

A study of interpretations of human experience in contemporary thought. Presupposes no previous knowledge of philosophy.

65:153(g). The Human Person — 3 hrs.

A study of various interpretations of the nature and process of being human.

65:154(g). American Philosophy — 3 hrs.

Major developments in American philosophy from their colonial origins to their contemporary expressions.

65:170. The Present Predicament — 3 hrs.

Explorations of certain societal trends which are posing a serious challenge to man's future; examination of human values and resulting institutional arrangements through which the values are expressed; consideration of alternatives.

65:172(g). Capitalism, Socialism, Democracy — 3 hrs.

Examination of the philosophical bases and ideological contrasts between capitalism, socialism, and democracy as an introduction to social and political philosophy. Prerequisite: junior standing or consent of instructor.

65:186(g). Studies in Philosophy — 3 hrs.

Study of philosophical thinker or problem to be announced in advance of registration.

65:189(g). Individual Readings in Philosophy — 1-3 hrs.

Individually arranged readings and reports drawn from (1) history of philosophy, or (2) contemporary philosophical problems. Repeatable for a maximum of 6 hours. Prerequisite: department head approval.

Religion

64:020. The Heritage of the Bible — 3 hrs.

A non-sectarian study of the Bible.

64:030. What is Religion? — 3 hrs.

Basic forms and views or religious phenomena, such as encounter, tradition, ritual, community, divine law, meditation, mysticism, response to life-crisis, and personal growth and fulfillment.

64:100. Biblical Greek — 3 hrs.

Introductory study of the Gospel of St. John designed to acquaint the student with the linguistic tools of textual analysis.

64:111(g). Development of Christianity: Basic Doctrines — 3 hrs.

Historical study of the development of the Christian doctrines of the Trinity, of Christ, and of the church, and other basic beliefs, centering on the first five centuries.

64:112(g). Development of Christianity: Catholicism — 3 hrs.

The development of Christian worship, sacraments, religious life, and the monastic, mendicant and mystical movements, as exemplified in Roman Catholicism up to 1500 A.D.

64:114. Development of Christianity: Reformation and Enlightenment — 3 hrs.

Luther, Calvin, the Radical Reformation; the Counter-Reformation; the development of Protestant orthodoxy and pietism; and other movements of the period.

64:115(g). Development of Christianity: Faith and Modern Thought — 3 hrs.

Issues raised by the encounter between traditional Christian faith and modern concepts and methods of philosophy, science, history, sociology, and cultural criticisms. Examines positions of both 19th and 20th-century theologians.

64:117(g). Religion in America — 3 hrs.

Investigation of religious movements and beliefs from colonial times to the present. Recommended to precede this course one of the following: 64:020; 64:124; 65:021. (same as 96:145).

64:121(g). Religion and Modern Literature — 3 hrs.

Analysis of religious ideas and images in 19th and 20th-century poetry, fiction, and drama. Prerequisite: junior standing or consent of instructor.

64:123(g). Religion and Literature — 3 hrs.

Religious convictions and influences in the sacred and secular literatures of the West. Prerequisite: junior standing or consent of instructor.

64:124. Religions of the World — 3 hrs.

Living religions of man with emphasis on their relevance to interpretations of existence, the problem of meaning and values, and human destiny.

64:126(g). Meditation and Mystical Experience — 3 hrs.

Examination of various techniques of meditation and their results, drawing from Yoga, Zen, Buddhist, Christian, and secular sources including first-hand accounts of meditational practice and philosophic and psychological studies in the area of mysticism.

64:130(g). Hinduism and Buddhism — 3 hrs.

Hinduism, Jainism, Buddhism, Islam.

64:132(g). Confucianism, Taoism, and Zen — 3 hrs.

Taoism, Confucianism, Buddhism, Shintoism.

64:134(g). Judaism, Eastern Christianity, Islam — 3 hrs.

The origin and development of Judaism, Eastern Christianity, and Islam; including examination of ancient Egyptian, Mesopotamian, and Graeco-Roman religions. 64:124 strongly recommended to precede.

64:135(g). Judaism — 3 hrs.

The historical and theological roots of Judaism with focus on the development of the Jewish "scriptures" and their effect on current Jewish practices and beliefs. Prerequisite: junior standing or consent of instructor.

64:139(g). Atheism — 3 hrs.

A critical introduction to various types of modern atheism.

64:141(g). Old Testament — 3 hrs.

An introduction to the history and ideas of the Old Testament. Prerequisite: junior standing or consent of instructor.

64:142(g). New Testament — 3 hrs.

An introduction to the history and ideas of the New Testament. Prerequisite: junior standing or consent of instructor.

64:160(g). Psychology of Religious Experience — 3 hrs.

Basic structures of religious experience, in relation to the concepts of identity, the unconscious, transformation, and transpersonal reality.

64:165(g). Sociology of Religious Communities — 3 hrs.

The use of social theory and methods for explaining religious community life: case studies of individual religious groups or movements, questionnaire studies of religious groups in a society, and social analysis of historical cases of past religious life. Prerequisite: junior standing or consent of instructor.

64:180(g). Seminar in Religion — 3 hrs.

Advanced topics in the study of religion. May be repeated once for credit. Prerequisite: three previous courses in religion or consent of instructor.

64:186(g). Studies in Religion — 3 hrs.

Study of special topic to be announced in advance of registration.

64:189(g). Individual Readings in Religion — 1-3 hrs.

Individually arranged readings and reports from (1) Biblical studies, (2) history of religions, or (3) contemporary religious thought. Repeatable up to 6 hours. Prerequisite: department head approval.

Physics

Intemann, Head. Engardt, R. J. Hanson, V. Jensen, Macomber, Olson, Unruh, Vilmain, R. T. Ward.

Physics Major — Teaching

Required: 80:060; 80:061; 82:190; 88:054; 88:056;
88:130; 88:131; 88:137; 88:138; 88:193 33 hours
*Electives: 9 hours in physics (at least 7 hours in 100-level courses) 9 hours
Electives: non-physics courses from College of Natural Sciences (excluding 82:020 and mathematics below 80:060) 6 hours
48 hours

*A course in electronics is highly recommended unless the student has a strong background in electronics.

Sufficient work including current curricula should be taken for certification approval in a second area. Common teaching combinations are physics-chemistry or physics-mathematics.

Physics Major — A

Major A is especially suitable for students (including double majors) desiring a broad background in science who are taking a substantial amount of work in other science areas. It is also suitable for students not seeking a high degree of specialization.

Required physics: 88:130; 88:131; 88:137; 88:138 13 hours
Electives in physics: 100-level courses (excluding 88:139); should include at least one course from 88:136; 88:166; 88:167; 88:172; and at least one from 88:152; 88:154; 88:161; 88:170; 88:175 13 hours
Required mathematics: 80:060; 80:061 8 hours
Electives in mathematics beyond 80:061 4 hours
Electives from College of Natural Sciences (excluding 82:020, mathematics below 80:060, and physics below 88:130) 14 hours
52 hours

Physics Major — B

This major is recommended for students seeking a rigorous background in physics as in preparation for graduate study.*

Required: 88:130; 88:131; 88:137; 88:138 13 hours
Electives in physics: 100-level (excluding 88:193), should include at least two courses from 88:136; 88:166; 88:167; 88:172 23 hours
Required mathematics: 80:060; 80:061; 80:062 or 80:063; 80:149 15 hours
Electives in chemistry: normally 86:044 and 86:048 or 86:070 and 86:140 7-8 hours
58-59 hours

*Major B provides preparation for graduate study in physics, engineering, and other sciences such as geophysics, astronomy, biophysics, medical physics. Students planning graduate study in physics or engineering are advised to include in their electives the theoretical courses 88:166, 88:167, 88:172, and, if possible, 88:136, as well as at least three of the following courses with associated laboratories: 88:152, 88:161, 88:170, and 88:175. If possible, more than the required amount of mathematics should be taken; suggested possibilities are: 80:147, 80:148, 80:153, 80:156, 80:160, and 80:161. Also, 81:070 is strongly recommended and, if possible, 80:176. An adviser should be consulted concerning the need for foreign language.

Physics Major — C

Physics Major C is an applied physics program* especially suitable for students seeking industrial or other applied employment after the B.A. degree. It could also serve as a background for graduate study in some applied science areas.

Required physics: 88:130; 88:131; 88:136; 88:137; 88:138; 88:152; 88:154; 88:140; 88:110; 88:184 ..	29 hours
Electives in physics: 100-level (excluding 88:193) ...	3 hours
Required mathematics: 80:060; 80:061; 80:063; 80:149	15 hours
Required computer science: 81:070	3 hours
Required chemistry: 86:070 or 86:044 and 86:048 ...	5-8 hours
	55-58 hours

*Applied Physics majors are strongly encouraged to complete minors in at least two of the following areas: computer science, chemistry, earth science, industrial technology, business.

Physics Minor — Teaching

Required: 88:054; 88:056	8 hours
Required: 88:193	2 hours
Electives in physics: 100-level courses (including no more than 4 hours from 88:152 and 88:154)	14 hours
	24 hours

Physics Minor

Electives in physics: 100-level courses (excluding 88:193)	16 hours
---	----------

Note: For some students, a background of 88:054 and 88:056 is recommended before enrolling in 88:130 and 88:131. Students with strong physics and mathematics background from high school may enroll in 88:130-131 without 88:054-056. Placement test may be taken in department. Chemistry or mathematics majors should enroll in 88:130-131 if physics is taken after the sophomore year. Students who have not had 88:054-056 should register for 88:060 concurrently with 88:130 and 88:061 concurrently with 88:131.

88:008. The Physics of Sounds — 3 hrs.

Basic principles of vibratory motion and sound generation; speed, transmission, absorption, reception, and analysis of sounds. Applications to music, noise, speech, and acoustics. Discussion, 2 periods; lab., 2 periods. May not be applied to a physics major.

88:010. Physics and the Environment — 3 hrs.

Basic physics principles necessary to understand certain contemporary problems of man's relationship to his environment. Application to energy production, use, and distribution; to thermal, light, radiation, and noise pollution; to clean air and water problems, and to transportation. Discussion, 3 periods. Does not apply toward a physics major.

88:018. Musical Sounds and Reproduction — 3 hrs.

Production, transmission, reception of sound; analysis and synthesis of complex musical tones. Applications to musical instruments, acoustics and electronic reproduction and amplification. Some background in music and/or audio systems desirable. Discussion, 2 periods; lab., 2 periods. Does not apply toward a physics major.

88:040. Elementary Holography — 1 hr.

Students make and view holograms with light from laser. Suitable for students with little or no background in physics. Presents elementary theory of holograms and laser light; emphasis on readily applied information and techniques. May not apply toward a physics major. 9-weeks course. Discussion, 1 period; lab., 2 periods.

88:052. Principles of Physics — 4 hrs.

Topics in mechanics, heat and electricity. Does not apply toward a physics major or minor. No credit given for a student with credit in 88:054 or 88:056. Prerequisite: 80:040 or consent of instructor. Discussion, 2 periods; lab., 2 periods.

88:054. General Physics I — 4 hrs.

Basic principles and interrelationships of matter, motion, and energy, including topics from classical and modern physics. Discussion, 3 periods; lab., 2 periods. Prerequisite: working knowledge of algebra and trigonometry.

88:056. General Physics II — 4 hrs.

Continuation of General Physics I. Discussion, 3 periods; lab., 2 periods. Prerequisite: 88:054.

88:060. Experiments in Physics I — 1 hr.

A laboratory to accompany 88:130 for students who have not taken 88:054. Corequisite: 88:130.

88:061. Experiments in Physics II — 1 hr.

A laboratory to accompany 88:131 for students who have not taken 88:056. Corequisite: 88:131.

88:110. Engineering Problems — 2 hrs.

Problems from applications of physics in engineering context emphasizing mechanics. Dimensional analysis, units; significant figures; approximations; intelligent calculation; graphical analysis; numerical solution and graphical interpretation of equations; algorithms for hand-held calculator; selected mechanics problems treated with calculator and computer. Prerequisite or corequisite: 80:060; prerequisites: 81:070; 88:054 or 88:130.

*88:120(g). Elementary Atomic and Nuclear Physics — 4 hrs.

Atomic and nuclear structure, elementary particles, radioactivity, wave-particle duality, interactions and detection of radiation. Lower mathematical level than 88:169. Prerequisite: 88:056. Discussion, 3 periods; lab., 2 periods. Not for physics majors.

88:130. Physics I — 4 hrs.

A calculus-based course in mechanics, heat, and wave motion. Discussion, 5 periods. Prerequisite or corequisite: 80:060.

88:131. Physics II — 4 hrs.

A calculus-based course in electricity, magnetism, and optics. Discussion, 5 periods. Prerequisite: 88:130; prerequisite or corequisite: 80:061.

88:134(g). Environmental Applications of Physics — 3 hrs.

Applications of physical laws and concepts to the understanding and possible solution of certain problems of the environment. Topics related to energy demands, production, use and distribution; and topics related to noise, thermal, air, water, and radiation pollution. Discussion, 3 periods. Prerequisites: 88:056 or 88:131; 80:048 or 80:061; or consent of instructor.

88:136(g). Thermodynamics — 3 hrs.

First and second laws of thermodynamics: PVT surfaces; reversibility, entropy; phase transitions; statistical viewpoint. Prerequisites: 80:062 or 80:063; 88:130.

88:137(g). Physics III — 4 hrs.

Special relativity; quantum phenomena; wave-particle duality; atomic and nuclear structure; properties of solids, interaction of radiation with matter; elementary particles. Prerequisite: 88:131. Corequisite: 88:138.

88:138(g). Physics III Laboratory — 1 hr.

Experiments on interactions of photons and electrons, mass and charge of electrons, atomic spectroscopy, nuclear radiation detection and spectroscopy, properties of solids. Corequisite: 88:137.

88:140(g). Holography Laboratory and Lasers — 2 hrs.

Laboratory procedures for making transmission and reflection holograms; interferometry; assembly and operation of external mirror laser; use of solid state diode laser with fiber optics. Theory of interference and laser operation. Discussion, 1 period; lab., 2 periods. Prerequisite: 88:056.

88:152(g). Electronics I — 4 hrs.

Basic d.c. and a.c. circuits, electrical measurements, power supplies, transistor circuits, operational amplifier circuits. Discussion, 2 periods; lab., 4 periods. Prerequisite: 88:056 or 88:052 and consent of instructor.

88:154(g). Electronics II — 4 hrs.

Programmable analog switching, operational amplifier applications, digital logic gates, digital counters and registers, analog-digital conversions, analog and digital data acquisition systems. Discussion, 2 periods; lab., 4 periods. Prerequisite: 88:152 or consent of instructor.

***88:157(g). Fundamentals of Physics I — 4 hrs.**

Basic principles of mechanics, heat, and sound. Enrollment limited to graduate students other than physics major and minors. Department approval required. Prerequisite: Working knowledge of algebra and trigonometry. Discussion, 3 periods; lab., 2 periods.

***88:158(g). Fundamentals of Physics II — 4 hrs.**

Basic principles of electricity, magnetism, light, and modern physics. Department approval required. Prerequisite: 88:157 or equivalent. Discussion, 3 periods; lab., 2 periods.

88:160(g). Optics Laboratory — 1 hr.

Imaging by mirrors, lenses and holograms; spectrometers; interference; Fraunhofer and Fresnel diffraction, polarization of light; optical communication using fiber optics and Pockel's cell; spatial and temporal modes of lasers. Corequisite: 88:161.

88:161(g). Optics — 3 hrs.

Theory of lenses, optical systems, Fraunhofer and Fresnel diffraction with applications to holography, electromagnetic theory of light, polarization, absorption, scattering and dispersion, fiber optics. Prerequisites: 88:131, 88:140; corequisite: 88:160.

88:166(g). Mechanics — 4 hrs.

Vector analysis, particle dynamics, dynamics of a system of particles. Motion of a particle in a central force field. Collision problems. Rigid body motion. Lagrange's equations. Theory of vibrations. Mathematical methods developed as needed. Prerequisites: 88:131; 80:149.

88:167(g). Electromagnetic Fields — 4 hrs.

Electrostatic fields and boundary value problems. Dielectric materials. Magnetic fields. Magnetic materials. Electromagnetic induction. Maxwell's equations and their applications. Mathematical methods developed as needed. Prerequisites: 80:149; 88:131.

88:170(g). Solid State Physics — 3 hrs.

Molecular binding; band theory of solids; electrical, thermal, and magnetic properties; imperfections; semiconductors; p-n junctions, and transistors. Prerequisite: 88:137. Corequisite: 88:171.

88:171(g). Solid State Physics Laboratory — 1 hr.

Corequisite: 88:170.

88:172(g). Introductory Quantum Mechanics — 4 hrs.

Solution of Schrodinger equation for several systems. Super-position of states. Matrix formulation. Physical interpretations. Prerequisites: 80:149; 88:137; 88:166; or consent of instructor.

88:175(g). Nuclear Physics — 3 hrs.

Interaction of radiation with matter; alpha, beta, and gamma decay; neutron physics and nuclear reactions; nuclear models; elementary particles; applications of nuclear physics. Prerequisite: 88:137; corequisite: 88:176.

88:176(g). Nuclear Physics Laboratory — 1 hr.

Corequisite: 88:175.

88:180. Undergraduate Research in Physics — 1-3 hrs.

Research activities under direct supervision of sponsoring staff members. Prerequisite: department approval.

88:184. Internship in Applied Physics — 1 hr.

Departmentally approved work in applied physics (as an industrial, medical, or government laboratory) followed by oral and written reports given on the completed work. May be repeated once for credit. Offered only on credit/no credit basis. Prerequisite: departmental approval.

88:185(g). Laboratory Projects — 1-3 hrs.

Experimental activities to meet individual needs and interests not normally included in other courses. Maximum of 3 hours credit may be applied to a physics major or minor. Prerequisite: departmental approval.

88:189(g). Readings in Physics — 1-3 hrs.

Readings/problems in areas of physics (or related interdisciplinary areas) not normally covered in other courses. Maximum of 3 hours may be applied to a physics major or minor. Prerequisite: departmental approval.

88:193(g). Current Curricula in Physics — 2 hrs.

Philosophy, methods, and materials of high school physics, curricula, including PSSC Physics, Project Physics, PSPE, TMMW, and others. Prerequisites: 8 hours of physics and 82:190 or consent of instructor. Discussion, 1 period; lab., 2 periods.

88:250. Special Problems in Physics — 1-6 hrs.

Credit determined at registration. Problems selected according to needs of students. Prerequisite: departmental approval.

88:280. Current Topics in Physics — 1-3 hrs.

Selected topics from areas of current interest in fundamental and applied physics: includes means of communication with high school students on these topics. Prerequisite: 88:137. May be repeated for a maximum of 6 hours.

88:291. Evaluation of Programs in Secondary School Physics — 3 hrs.

Critical examination of the philosophy, materials and instructional techniques in secondary school physics programs such as PSSC Physics, Project Physics, IPS Physical Science and others. Study of educational research done on these programs will be included. Discussion, 3 periods. Prerequisite: 15 hours of physics and two years of physics teaching experience; 88:193 recommended.

88:292. Research Methods in Physics — 3 hrs.**88:299. Research.**

Political Science

R.L. Ross, Head. L. Alberts, Hays, Krogmann, Malecha, Metcalfe, Stavis, Vajpeyi, Winter.

Political Science Major — Teaching

Required: 94:011; 94:014; 94:124; 92:053; 98:058;	
90:190	19 hours
Required: 94:131 or 94:134	3 hours
Required: one of the following: 94:160; 94:161;	
94:166	3 hours
Required: one of the following: 94:135; 94:149;	
94:164; 94:165; 94:168; 94:170; 94:183	3 hours
Electives in political science	8 hours
	<hr/> 36 hours

A minor is required in one of the following: History, sociology, economics, or geography.

Political Science Major

Required: 94:011; 94:014; 94:124; 92:053; 98:058 ...	16 hours
Required: 94:131 or 94:134	3 hours
Required: one of the following: 94:160; 94:161;	
94:166	3 hours
Required: one of the following: 94:135; 94:149;	
94:164; 94:165; 94:168; 94:170; 94:183	3 hours
Electives in political science	15 hours
	<hr/> 40 hours

No minor is required.

Political Science Minor — Teaching

Required: 94:011; 94:014; 94:124	10 hours
Required: 94:131 or 94:134	3 hours
Required: one of the following: 94:160; 94:161; 94:166	3 hours
Required: one of the following: 94:135; 94:149; 94:164; 94:165; 94:168; 94:170; 94:183	3 hours
Electives in political science	1-3 hours
	20-22 hours

Political Science Minor

Required: 94:011; 94:014; 94:124	10 hours
Required: one of the following: 94:160; 94:161; 94:166	3 hours
Required: one of the following: 94:135; 94:149; 94:164; 94:165; 94:168; 94:170; 94:183	3 hours
Electives in political science	3 hours
	19 hours

Public Administration Major

A student declaring a major in Public Administration will be required to have sophomore standing and a minimum g.p.a. of 2.5 for all courses whether taken at UNI or transferred from other institutions. To graduate with a major in Public Administration a student must have a cumulative g.p.a. of 2.5 in course work taken at UNI in the Public Administration major.

Required (prerequisite to <i>core</i>): 94:014; 94:148	6 hours
Required <i>core</i> : 94:153; 94:172; 94:173 or 94:134; 94:174	12 hours
Required: 98:080; 81:070; 94:176	9 hours
Required internship: 94:180; 94:181 (4-8 hrs.)	6-10 hours
Required: 15 hours from one of six areas of concentration	15 hours
	48-52 hours

Area 1 — General Administration — 15 hours from:

94:171; 94:189 (1-3 hrs.); 94:149; 94:132; 94:131; 15:153;
50:077; 45:144; 45:172; 45:196; 92:053; 92:054; 92:117.

Area 2 — State and Community Planning — 15 hours from:

94:189 (1-3 hrs.); 94:131; 94:132; 94:171; 97:132; 97:135;
97:136; 98:110; 31:163; 98:148; 97:142; 96:124; 45:196;
97:060.

Area 3 — Public Law — 15 hours from:

94:189 (1-3 hrs.); 94:136; 94:146; 94:147; 94:141; 94:142;
94:140; 15:105.

Area 4 — Public Personnel — 15 hours from:

94:189 (1-3 hrs.); 40:157; 40:158; 45:163 or 98:130; 15:153;
15:165; 15:187; 97:150; 98:114; 31:051; 31:055; 40:160; 92:116.

Area 5 — Public Services — 15 hours from:

94:189 (1-3 hrs.); 94:132; 94:140; 98:110; 45:163 or 98:130;
97:132; 45:040; 45:144; 31:153; 31:055; 40:160; 97:185;
97:142; 98:060; 99:166; 45:196; 45:173; 45:121; 45:175.

Area 6 — Public Policy — 15 hours from:

94:173 or* 94:134; 94:140; 94:189 (1-3 hrs.); 94:152; 94:154;
94:155; 97:120; 97:125; 98:125; 98:120; 98:148; 31:163;
45:040; 45:144; 45:121; 45:173; 45:175; 98:135.

(*Course selected for *core* may not be counted in this concentration.)

94:010. Survey of American Politics — 3 hrs.

Course designed to meet teacher certification requirements. General Education credit for all students except Political Science majors and minors. Student may not receive credit for this course and also for 94:014.

94:011. Introduction to Political Science — 3 hrs.

Fundamental concepts and approaches to the scientific study of politics.

94:014. Introduction to American Politics — 3 hrs.

The processes and functions of American government in relation to concepts of American democracy and to practices of other governments.

94:020. Contemporary Political Problems — 3 hrs.

Current political problems/issues; General Education credit for all students except Political Science majors and minors.

94:024. Politics for General Education — 3 hrs.

Introduction to contemporary political institutions, ideas, and processes in the contemporary world. General Education credit for all students except Political Science majors and minors.

94:026. World Politics — 3 hrs.

Conflict and cooperation in world politics. Current international problem areas and area problems. The Atlantic Community; Soviet Union; Eastern Union; Far East; Southeastern Asia; Africa; Latin America. Not open to students who have had 94:124.

94:112. Political Parties — 3 hrs.

Organization and operation of political parties and elections in the United States. Prerequisite: sophomore standing or consent of instructor.

94:124. International Relations — 4 hrs.

Basic factors affecting positions and policies of states and their leaders. Implementation of national policies. Contemporary power system. Conflict resolution. Prerequisite: sophomore standing or consent of instructor.

94:127(g). United States Foreign Policy — 3 hrs.

Factors influencing the formation and execution of United States foreign policies and specific instruments of foreign policy. Prerequisite: junior standing or consent of instructor.

94:128(g). Foreign Policies of the Soviet Union — 3 hrs.

The formulation and implementation of Soviet foreign policies. Prerequisite: junior standing or consent of instructor.

94:131. American State Politics — 3 hrs.

An analysis of the organization, functions and operation of state and local governments. Prerequisite: sophomore standing or consent of instructor.

94:132. Community Political Systems — 3 hrs.

Structure and functions of city government. Relation of the city to the state. Prerequisite: sophomore standing or consent of instructor.

94:134(g). Congressional and Administrative Policy Making — 3 hrs.

Congressional-Administrative-Presidential politics in the formulation and execution of public policy. Prerequisites: 94:014; 94:148; junior standing or consent of instructor.

94:135(g). Modern European Democracies — 3 hrs.

Political institutions, processes, and policies of Western European Democracies; emphasis on Great Britain, France, and West Germany. Prerequisite: junior standing or consent of instructor.

94:136(g). Administrative Law — 3 hrs.

The judicially enforceable requirements upon administrative agencies which affect private interests by making rules and orders, adjudicating cases, investigating, prosecuting, publicizing, and advising. Also, the legislative and executive controls over the agencies. Prerequisite: junior standing or consent of instructor.

94:140(g). Adjudication of Social Issues — 3 hrs.

Examination of the legal and structural elements of governmental involvement in social problems, creating new rights, obligations, and bureaucracies. Prerequisite: junior standing or departmental approval.

94:141(g). Constitutional Law — 3 hrs.

The Constitution of the United States as fundamental law. Prerequisite: junior standing or consent of instructor.

94:142(g). Problems in Juvenile and Family Law — 2 hrs.

Aspects of juvenile and family law; how the legislature and the courts have developed juvenile and family law, including marriage and divorce, adoption, and competency of minors. Prerequisite: junior standing or consent of instructor.

94:143(g). International Law — 3 hrs.

Legalistic rules studied in the context of a case-by-case analysis and synthesis. Prerequisite: junior standing or consent of instructor.

94:144(g). International Political Issues — 3 hrs.

Analysis of effectiveness of international institutions and processes in dealing with selected international issues. Prerequisite: junior standing or consent of instructor.

94:146(g). Law and the Courts I — 2 hrs.

Study of the courts in America today with particular emphasis on trial courts and their impact on the community.

94:147(g). Law and the Courts II — 2 hrs.

Study of judicial law making, private influences on court-expanded rights, and law school methods.

94:148(g). Introduction to Public Administration — 3 hrs.

The place of public servants in the functioning of government and recent trends in the expansion of administration. Prerequisite: sophomore standing or consent of instructor.

94:149(g). Comparative Administration — 3 hrs.

Analysis of models and theories of comparative administration by adopting "idiographic" approach and explanation of differences in administrative behavior of different administrative systems. Prerequisite: junior standing or consent of instructor.

94:150(g). Political Opinion and Public Policy — 3 hrs.

The formation and development of political opinion by interest groups and mass media in the shaping of public policy. Prerequisite: junior standing or consent of instructor.

94:151(g). Literature on the Modern Presidency — 3 hrs.

Analysis of the character of the office, the men who have occupied it, and the role of the institution in American politics. Prerequisite: junior standing or consent of instructor.

94:152(g). Government and Business — 3 hrs.

The dynamics and legalities of regulatory administration. Prerequisite: junior standing or consent of instructor.

94:153(g). Politics of Bureaucracy — 3 hrs.

Role of the administrative system in public policy process, interaction among agencies, interest groups, overhead control units. Congress, courts, the political parties, mass media, and public opinion. Prerequisites: 94:014; 94:148; junior standing or consent of instructor.

94:154(g). Legislative Process — 3 hrs.

An analysis of the functions, powers, organization, processes, and problems of legislative systems in a comparative framework. Prerequisite: junior standing or consent of instructor.

94:155(g). Environmental Policy Making — 3-4 hrs.

Examination and analysis of domestic and foreign policies of the U.S.A. and selected foreign countries concerning pollution and resource scarcity. Graduate student may enroll for only 3 hrs. credit. With advance permission of instructor, undergraduate student may enroll for total of 4 hrs. credit which requires contracting for completion of original research project. Prerequisite: junior standing or consent of instructor.

94:160(g). Western Political Thought — 3 hrs.

The development of political thought from Plato to the present, with primary emphasis on the relationship between man and the state.

94:161(g). Political Thought — Marx to Easton — 3 hrs.

94:164(g). Government of the Soviet Union — 3 hrs.

The Soviet political system with emphasis upon the institutions and groups involved in the determination and implementation of public policy. Prerequisite: junior standing or consent of instructor.

94:165(g). East Asian Politics — 3 hrs.

Political structures and institutions of China and Japan with emphasis on the modernization process since the middle of the 19th century. Prerequisite: junior standing or consent of instructor.

94:166(g). Chinese Political Thought: From Taoism to Maoism — 3 hrs.

Political philosophy from Lao Tzu to Mao Tse-tung with emphasis on latter as representing a unique synthesis of cultural traditionalism. Marxism-Leninism and ideological innovation. Prerequisite: junior standing or consent of instructor.

94:168(g). Politics of South Asia — 3 hrs.

Parliamentary institutions and politics; political movements and independence; the parties; the politics of language, caste, and tribe; democracy and economic change; goals and styles of political leadership; religion and politics; problems of nation building; and current trends in the countries of this area. Prerequisite: junior standing or consent of instructor.

94:169(g). Politics of the Middle East — 3 hrs.

A comparative analysis of major middle eastern countries, the role of religion, elites, and military in the state and nation-building processes, middle east in world affairs, modernization, technologicalization and political development. Prerequisite: junior standing or consent of instructor.

94:170(g). Politics of Modernization in Developing Areas — 3 hrs.

Theories of political development and modernization in relation to political systems of developing countries of Africa, Asia, and Latin America. Prerequisite: junior standing or consent of instructor.

94:171(g). Community Planning and Development — 3 hrs.

Examination of the politics and theories of planning and development of the local and regional community. Prerequisites: 94:014; 94:148; junior standing or consent of instructor.

94:172(g). Public Budgeting — 3 hrs.

Historical development of current budgeting practices; the politics of budgetary process at the federal, state and local level; and current methods of budgeting for public agencies, focusing on integration of budgeting into program planning. Prerequisite: 94:014; 94:148; junior standing or consent of instructor.

94:173(g). Public Policy Analysis — 3 hrs.

Macro and micro-level models and techniques examined for public policy analysis; provides experience in application of those models and techniques through case studies of major policy areas. Prerequisites: 94:014; 94:148; junior standing or consent of instructor.

94:174(g). Public Personnel Administration — 3 hrs.

Development of current government personnel practices; contemporary issues in personnel administration; techniques of job analysis; recruitment and selection of employees; problems of supervision and evaluation. Prerequisites: 94:014; 94:148; junior standing or consent of instructor.

94:176(g). Methods of Public Policy Research — 3 hrs.

Applications of statistical techniques and computer analysis techniques to problems of public management. Prerequisites: 98:080; 81:070; junior standing or consent of instructor.

94:180. Orientation to Fieldwork in Politics — 2 hrs.

Discussion with government officials, analysis of relations between the press and government, and experience using reference materials in law, administration, politics, and economics. Prerequisites: departmental approval; 15 hours of political science including 94:014 and 94:131.

94:181. Internship in Politics — 3-8 hrs.

Student serves as intern with government official or in public or private agency. Required: junior standing, political science major. Prerequisite: departmental approval; 94:180. 1) Federal; 2) State; 3) Local; 4) Intergovernmental; 5) Legal; 6) Interest Group; 7) International; 8) Electoral.

94:182. Post-Intern Seminar — 3 hrs.

Debriefing for interns in politics emphasizing comparison of scholarly writings on politics with the intern's practical political or administrative experience. Departmental approval required. Prerequisite: 94:181.

94:183. Introduction to Comparative Politics — 3 hrs.

Basic theoretical concepts in comparative politics for studying and understanding political systems. Prerequisite: sophomore standing or consent of instructor.

94:189(g). Readings in Political Science — 1-3 hrs.

Prerequisite: 12 hours in Political Science and departmental permission. May be repeated only with permission of the department.

94:198. Independent Study.

94:224. International Politics — 3 hrs.

Prerequisite: 94:124 or consent of instructor.

94:275. Political Science Methodology — 3 hrs.

Basic methods for gathering and presenting knowledge of the discipline. Application to teaching will be stressed.

94:279. Internship in Politics — 3-6 hrs.

Student internship in one of eight types. Prerequisite: departmental approval. 1) Federal; 2) State; 3) Local; 4) Intergovernmental; 5) Legal; 6) Interest Group; 7) International; 8) Electoral.

94:280. Seminar in Political Science — 3 hrs.

94:285. Individual Readings — 1-3 hrs.

May be repeated.

94:289. Seminar in Comparative Politics — 3 hrs.

94:289. Seminar in American Politics — 3 hrs.

94:289. Seminar in Political Thought and Theory — 3 hrs.

94:292. Research and Bibliography — 3 hrs.

94:299. Research.

Psychology

Gilgen, Head, Barrios, Gackebach, Gilpin, G. Harrington, Hellwig, Somerville, Wallace, Walsh, Whitsett, Yates.

Psychology Major — Teaching

Required: 40:045; 40:049; 40:118; 40:150; 40:193;	
90:190	20 hours
Beginning-level electives: six hours from the following:	
40:110; 40:120; 40:123; 40:155; 40:160; 40:161	6 hours
Basic science options: nine hours from the following:	
40:106; 40:127; 40:149; 40:152; 40:153; 40:162;	
40:163	9 hours
Advanced electives: six hours from the following: 40:125;	
40:142; 40:157; 40:158; 40:165; 40:166; 40:170;	
40:171; 70:173; 40:175; 40:189 (3 hrs. maximum);	
40:192 (3 hrs maximum)	6 hours
	41 hours

Psychology Major

Required: 40:045; 40:049; 40:118; 40:150; 40:193	17 hours
Beginning-level electives: six hours from the following:	
40:110; 40:120; 40:123; 40:155; 40:160; 40:161	6 hours
Basic science options: nine hours from the following:	
40:106; 40:127; 40:149; 40:152; 40:153; 40:162;	
40:163	9 hours
Advanced electives: six hours from the following: 40:125;	
40:142; 40:157; 40:158; 40:165; 40:166; 40:170;	
40:171; 40:173; 40:175; 40:189 (3 hrs. maximum);	
40:192 (3 hrs. maximum)	6 hours
	38 hours

Psychology Minor — Teaching

Required: 40:045; 40:049; 40:118; 40:150	14 hours
Basic science options: three hours from the following:	
40:106; 40:127; 40:149; 40:152; 40:153; 40:162;	
40:163	3 hours
Electives in psychology	6 hours
	22 hours

Psychology Minor

Required: 40:045; 40:118	7 hours
Electives in psychology	15 hours
	22 hours

40:008. Introduction to Psychology — 3 hrs.

Provides a foundation for psychological understanding. Course requires either (1) participation as a subject in psychological research, or (2) an alternative acceptable to both the student and the department which provides a similar educational experience.

40:045. Research Methods — 4 hrs.

Introduction to fundamentals of psychological inquiry. Emphasis on experimental research but all major approaches (correlational, field, clinical, phenomenological) considered. Prerequisites: 40:008 and two electives in psychology.

40:049. Psychological Statistics — 4 hrs.

An introduction to the basic methods of collecting, organizing, and analyzing psychological data. Emphasis is placed on statistical inference, e.g., t tests, F tests, and selected non-parametrics. The course is designed to provide the student with the basic statistical concepts and skills necessary for the laboratory and survey work and to provide adequate quantitative background for understanding psychological literature. Prerequisites: 40:008; 40:045.

40:106(g). Psychology of Human Differences — 3 hrs.

The nature and extent of human differences as they apply to an understanding of general psychology of the individual and group differences in a social setting. Prerequisite: 40:008 and 40:049; junior standing or consent of instructor.

40:110. Psychology of Sex Differences — 3 hrs.

Survey of theory and data available regarding the psychological, biological, and sociological differences between the sexes; special emphasis on expanded sex roles for men and women in contemporary society. Prerequisite: 40:008.

40:118(g). History and Systems of Psychology — 3 hrs.

Prerequisite: one course in psychology or departmental approval.

40:120. Introduction to Developmental Psychology — 3 hrs.

Theory and research methods used in study of development of organisms (especially human); developmental perspective as part of the process of psychological inquiry. Prerequisite: 40:008 or equivalent.

40:123. Introduction to Behavior Modification — 3 hrs.

Behavioral approach to behavior change based upon learning principles. Stresses analysis of ongoing behavior and the means of implementing change in a variety of everyday situations. Prerequisite: 40:008 or equivalent.

40:125(g). Child Psychopathology — 3 hrs.

Overview of childhood problems ranging from minor problems in adjustment to severely disabling disorders; primary focus on research findings relevant to assessment, etiology, prognosis, and management. Prerequisites: 40:008; plus any one from 40:120, 31:055, 20:100, or equivalent of one of these, or consent of instructor.

40:127(g). Introduction to Neurology — 3 hrs.

Introduction to basic nervous system structure and function including the neuron, peripheral nervous system, the senses, the brain stem, neural control of movement and coordination, the forebrain and its specific functions, and brief coverage of methods of study and clinical neurology. Prerequisite: junior standing and consent of instructor.

40:130. Computer Programming for Psychological Applications — 2 hrs.
FORTRAN programming and utilization of library programs and systems. Statistical analysis and related problems common in psychological applications. Prerequisite: one course in statistics recommended. Laboratory. No credit for student who has credit in 80:070.

40:142(g). Abnormal Psychology — 3 hrs.
Causes of abnormal behavior. Characteristics of major abnormalities. Classification of organic and functional disturbances. Prerequisite: 40:008.

40:149(g). Principles of Psychological Testing — 3 hrs.
Principles of design, construction, evaluation, and interpretation of psychological tests. Prerequisites: 40:049; junior standing or consent of instructor. No graduate credit for graduate students in psychology.

40:150(g). Conditioning and Learning — 3 hrs.
Basic concepts and processes in learning. Five periods per week. Prerequisite: 40:045.

40:152(g). Sensation and Perception — 3 hrs.
Sensory and perceptual processes and states with emphasis on visual experiences. Prerequisite: 40:045; junior standing or consent of instructor.

40:153(g). Thought and Language — 3 hrs.
A study of complex human behavior with emphasis on cognitive variables intervening between the observable stimulus and response. Includes the topics of language, thinking, concept formation and problem solving with related motivational constructs. Prerequisite: 40:045; junior standing or consent of instructor.

40:155. Physiological Psychology — 3 hrs.
Neurobiological basis of behavior; how human brain receives sensory input, integrates information, and directs responses; neural control of arousal, sleep, dreaming, eating, and sexual behavior; physiological mechanisms of learning, memory, and emotion. Prerequisite: 40:008 or equivalent, or consent of instructor.

40:157(g). Personnel Psychology — 3 hrs.
Processes involved in recruiting, selecting, training, and evaluating employees in all types of organizations; underlying assumptions and current techniques in use. Prerequisite: 40:008 or equivalent.

40:158(g). Organizational Psychology — 3 hrs.
Work motivation, job satisfaction, work group influences, and the structure of work; explores the most influential theories in the field and the most widely used applications of theories. Prerequisites: 40:008 or equivalent; junior standing or consent of instructor.

40:160. Introductory Social Psychology — 3 hrs.
Overview of social psychology from perspective of general psychology; includes social perception, attraction and liking; affiliation, social influence, group dynamics, and attitude formation and change. Prerequisite: 40:008 or equivalent.

40:161. Psychology of Personality — 3 hrs.
Prerequisite: 40:008.

40:162(g). Social Psychology — 3 hrs.
Prerequisite: 40:049; junior standing or consent of instructor.

40:163(g). Developmental Psychology — 3 hrs.
Research and theories on the processes of development. Prerequisites: 40:045; 40:049; 40:120; junior standing or consent of instructor.

40:165(g). Physiological Psychology Laboratory — 2 hrs.
Basic laboratory procedures used by physiological psychologists; student will use procedures to design and implement a short research project. Prerequisite or corequisite: 40:155; or consent of instructor.

40:166(g). Clinical Psychology — 3 hrs.
Contemporary practice of clinical psychology with emphasis on the theories and techniques of behavioral assessment. Prerequisite: junior standing or permission of instructor.

40:170(g). Drugs and Individual Behavior — 3 hrs.
Effects of psychoactive drugs on behavior; legal and ethical aspects of studying drug effects and regulating drug use discussed with drug abuse as a psychological phenomenon. Prerequisite: junior standing or permission of instructor.

40:171(g). Advanced Behavior Modification — 3 hrs.
Current approaches to modifying human behavior, focusing on a cognitive learning perspective. Includes: behavioral self-control, biofeedback, and assessment and modification of addictive behavior. Prerequisites: junior standing; 40:123 or consent of instructor.

40:173(g). Psychology of Aging — 3 hrs.
Analysis of the factors affecting the aged individual. Emphasis on physiological, cognitive, sensory, personality and interpersonal changes occurring with age. Prerequisite: 40:008 or equivalent; junior standing or consent of instructor.

40:175. Environmental Psychology — 3 hrs.
Survey of broad range of interactions between people and everyday, indoor settings; specific attention to the evaluation of the effects of the characteristics of such settings on behavior. Prerequisite: 40:008 or equivalent.

40:189(g). Seminar in Psychology — 1-3 hrs.
Provides opportunity to correlate previous course work and knowledge in field of psychology. Prerequisites: 15 hours of psychology, including 40:045 or consent of instructor. May be repeated for up to 6 hours of credit.

40:190(g). Pre-Clinical Practicum — 3 hrs.
Field placement in a mental health or social service agency under supervision. Prerequisites: junior standing; 40:142; 40:166.

40:192(g). Practicum in Teaching Psychology — 2-3 hrs.
Organization and teaching of psychology; student serves as participant/observer, with advance approval, in any 40:xxx course.

40:193(g). Research Experience in Psychology — 1-3 hrs.
Research participation and/or independent supervised research including experience in each of the following: Search of the literature; analysis of theoretical issues; design, instrumentation, and conduct of one or two major experiments; analysis of results; and preparation of research reports. Prerequisites: 40:049; 40:150; 15 hours in psychology; and permission of the department. A total of six semester hours of credit may be allowed.

40:225. Advanced Psychopathology — 3 hrs.
An examination of alternative models of psychopathology with emphasis on genetic, physiological, and developmental determinants of behavior disorders. Review of the empirical literature on the etiology, maintenance, and treatment of disordered behavior. Prerequisites: graduate standing in psychology or permission of the instructor.

40:239. Advanced Statistics and Research Design — 3 hrs.
Review of elementary descriptive and inferential statistics, analysis of variance and covariance models, multiple linear and curvilinear regression models, the generalized linear model, and an introduction to robust estimation.

40:240. Learning — 3 hrs.
Empirical and theoretical approaches to animal and human learning covering topics in classical and instrumental conditioning. Prerequisite or corequisite: 40:239.

40:249. Cognitive and Intellectual Assessment — 3 hrs.
An introduction to the nature, use, and interpretation of tests for assessing intelligence and cognition in varied populations in this and other cultures. Prerequisite: graduate standing in psychology or permission of the instructor.

40:250. Cognition — 3 hrs.
Survey of contemporary (and historical) approaches to mind, including findings and methods of psycholinguistics, information processing, computer simulation, structuralism, and experimental cognitive psychology. Prerequisite or corequisite: 40:239.

40:251. Psychological Measurement — 3 hrs.
Scaling, psychometric methods and selected topics in multivariate analysis. Prerequisite: 40:239.

40:252. Human Development Through the Life Span — 3 hrs.
(same as 31:252.)

40:260. Personality — 3 hrs.
A comparative study of major personality theories and techniques of personality assessment. Prerequisite or corequisite: 40:239.

40:262. Personality Assessment — 3 hrs.

An overview of theoretical and empirical issues in the measurement of personality. Considers reliability and validity of projective and actuarial methods of personality assessment, and criticism of personality assessment, and provides an introduction to the theory and techniques of behavior assessment as an alternative to traditional trait and psychodynamic approaches. Prerequisite: graduate standing in psychology or permission of the instructor.

40:289. Seminar.**40:297. Practicum.****40:299. Research.**

Required: 84:051; 84:052; 84:168	11 hours
86:044; 86:048; or 86:070	5-8 hours
87:031; 87:035; 87:021	10 hours
88:054; 88:010	7 hours
82:190; 82:194	4 hours
84:103	3 hours
82:132; 82:195	4 hours
Electives in biological and physical sciences, 100-level	8-11 hours
	55 hours

The Science major with this emphasis is required to have completed four (4) years of senior high school mathematics or to take 80:040 or 80:046. Credit for these two courses may not be applied as credit for this program.

Science Major

Required: two of the following four science areas for a total of	12-16 hours
Biology: 84:051 and 84:052	
Chemistry: 86:044 and 86:048; or 86:070	
Earth Science: 87:031 and 87:035	
Physics: 88:054 and 88:056	
Electives in science	22-26 hours
	38 hours

The equivalent of at least 10 hours in a foreign language or in computer science is strongly recommended for this science major.

Emphasis: Environmental Planning

The Environmental Planning Emphasis under the Science Major is coordinated by an interdepartmental faculty committee appointed by the Dean of the College of Natural Sciences and is designed for those seeking the scientific principles, integrated theory, and practical experience in the field of environmental planning and land use from the ecological approach. The committee will review progress of students at the end of the sophomore and junior years and will recommend awarding of the emphasis upon its completion. A minimum over-all grade point average of 2.50 is required for retention in the program.

Required Science: 84:051; 84:052; 84:103; 84:168; 86:048 or 86:070; 87:031; 87:035; 88:052 or 88:056	29-30 hours
One of the following electives in Geography: 97:125; 97:135; 97:136; 97:142	3 hours
Other requirements: 92:024 or 92:054; 94:155; 97:109 or 80:072 or 84:157; 97:120 or 97:132	12 hours
Internship (84:195) or independent study which may take the form of field experience with a planning agency, an environmental planning study conducted by the student, or similar practical experience	3-4 hours
Two of the following electives in Science to make total of 55 hours: 84:160; 84:166; 84:180; 87:129; 87:141; 88:134; 89:105	7-9 hours
	55 hours

In addition, the following courses are recommended: 81:070; 84:176; 84:182; 97:060; 98:148.

Science and Science Education

There is no science department as such. The science majors and the general courses in science are offered under the jurisdiction and the general supervision of the Dean of the College of Natural Sciences. The responsibility for programs and courses in science education is delegated to the Science Education Faculty under its chairman. Members of the Science Education Faculty hold their primary appointments in the various science departments in the College of Natural Sciences.

Science Major — Teaching

This major is intended especially for students desiring to teach science in the junior high school.

Required:

Biology: 84:051; 84:052	8 hours
Chemistry*: 86:044 and 86:048; or 86:070	5-8 hours
Earth Science: 3 courses from 87:010 (with 87:011); 87:021; 87:031; 87:035	9-11 hours
Mathematics: two courses from 80:040; 80:046 or 80:111; 80:060; 80:061; 81:070	7-8 hours
Physics*: 88:054 88:056	8 hours
Science methods: 82:190; and 82:194 or 84:193 or 86:193 or 88:193	4 hours
Science teaching: 82:195 (to be taken over a 2-semester period)	1 hour
Electives in science to total 55 hours (must include 6 hours at 100-level)	7-13 hours
	55 hours

*Students with sufficient high school preparation should consult with departments for proper beginning course. Students may test out of beginning course and substitute another course from that department.

Students seeking certification in particular disciplines should contact the Dean of the College of Natural Sciences for these guidelines.

Emphasis: Environmental/Conservation Education

This emphasis is designed to prepare junior high school science teachers to serve also as specialists in environmental/conservation education.

General Science Subject Field — Middle School/ Junior High School Education Major*

Required: 82:130 or 21:141; 82:194	5 hours
Required: one 3- or 4-credit course in each of the following areas: physics, chemistry, biology, earth science	12-16 hours
Electives in science to total 26 hours	5-9 hours
	26 hours

(*See Department of Curriculum and Instruction, page 68.)

Courses in Science

82:020. The Physical Sciences — 3 hrs.

Introduction to basic ideas of astronomy, motion, energy, atoms and the structure of matter, and methods of science. Discussion, 3 periods; or discussion, 2 periods and investigations, 1 period.

82:031. Activity Based Science I (Physical Sciences) — 3 hrs.

An activity-based introduction to basic concepts and processes of several areas of science, particularly the physical sciences. Uses of classification systems and models stressed. Student is expected to continue with 82:032 the following semester.

82:032. Activity Based Science II (Biological Sciences) — 3 hrs.

Continuation of 82:031; Emphasis in biological sciences. Major theme: role of energy in individual organisms, in the atmosphere, and in ecological systems. Prerequisite: 82:031 or other course from the physical sciences.

82:113(g). Techniques for Science Teachers — 1-3 hrs.

Techniques applicable to more than one science area; may include photography for science teachers, current learning psychologies as applied to the sciences, or preservation and display of scientific specimens. Topic to be listed in Schedule of Classes. May be repeated for credit in a different topic. Application to major requires approval of student's adviser. Prerequisite: junior standing.

82:130(g). Experiences in Elementary School Science — 3 hrs.

For majors in elementary or middle school/junior high education. Develops understanding of science as an investigative process. Teaches significant concepts of natural science through activities which demonstrate procedures and approaches appropriate for use with children at elementary and intermediate level. Problems of use in classroom discussed; some curriculum materials surveyed.

82:132. Experience in Environmental Education — 3 hrs.

Current trends in interdisciplinary theory and content of the environmental education process; theory and practice with techniques, materials, and equipment of environmental education in the classroom and the out-of-doors. Development of outdoor laboratories on school grounds and in parks included. Discussion, lab., and field work, 4 periods.

82:175. The Nature of Science — 2 hrs.

Science as a field of subject matter, with consideration of its nature, development, and methods, using a chronological approach with a philosophical emphasis. Special attention is paid to the interrelations of the various sciences, the relations of science (including the social sciences and psychology) to other fields, such as philosophy, religion, and art, and the interactions of science and these other areas of thought and culture throughout history and in current times. Discussion, 2 periods.

82:189. Seminar in Environmental Problems — 1 hr.

Current topics to be explored by student teams. Team examination of various facets of an issue, focusing upon development of a factual resume of natural, political, economic, and humanistic data which will be integrated for use in developing potential solutions. Will include value clarification activities.

82:190. Orientation to Science Teaching — 2 hrs.

Nature of science in its descriptive, technological and investigative aspects as they relate to the development of a philosophy of teaching; interrelation of various sciences; psychological theories of learning science and how they relate to developing instructional strategies. Required for certification to teach secondary school science; to precede student teaching. Discussion, 2 periods. Prerequisites: 20:017; 20:030; junior standing; a major or minor in a science area; or consent of instructor.

82:194(g). Current Curricula in Junior High Science — 2 hrs.

Discussion and laboratory experience in modern curricula; Intermediate Science Curriculum Study (ISCS), Introductory Physical Sciences (IPS), Earth Science Curriculum Project (ESCP), Individualized Science Instruction System (ISIS), plus other commercial curricula. Prerequisites: 82:190 or 20:040; 6 hours in science; or consent of instructor. Discussion, 1 period; lab., 2 periods.

82:195. Science Teaching Colloquium — 1 hr.

Presentation and discussion of current topics related to elementary and secondary science teaching, including scientific and educational research, teaching philosophies, innovative teaching techniques, etc. Course consists of 14 meetings over a two-semester period. For Science (Teaching) majors, to be taken prior to student teaching.

82:198. Independent Study.

82:200. History and Philosophy of Science — 2 hrs.

Survey of major developments of history of science in Western civilization. Study of the relationships between these developments and the history of philosophy.

82:230. Environmental Education Program Development — 3 hrs.

Application of environmental/conservation education content and process to curriculum and program development. Students will formulate or revise programs for their own employment situations. Prerequisites: 84:103 or 84:104, and two years of experience as a teacher or in an occupation related to environmental/conservation education. To be offered during the summer at Iowa Teachers Conservation Camp.

82:270. Special Problems in Science Education — 1-6 hrs.

Problems selected according to needs of students. Prerequisite: approval of the chairman of the Science Education Faculty.

82:280. Seminar in Science Teaching — 2 hrs.

82:299. Research.

Social Science

There is no social science department as such. The programs and the general courses in social science are offered under the jurisdiction of the Social Science Education Committee and the general supervision of the Dean of the College of Social and Behavioral Sciences. Students will be advised by committee members from the departments of Economics, Geography, History, Political Science, Psychology, and Sociology and Anthropology. Inquiries should be directed to the undergraduate coordinator, Social Science Program, College of Social and Behavioral Sciences.

Social Science Major — Teaching

Required: 90:190	3 hours
Required: 96:014; 96:015; plus 6 additional hours in American history; or 96:054; 96:055; plus 6 additional hours in European, Asian, Latin American, and/or African history; for a total of	12 hours
Required: 92:053; 92:054; plus 6 additional hours in economics (92:139 and 92:141 recommended)	12 hours
Required: 94:014; plus 9 additional hours in political science which includes a 3-hour course in comparative government or international relations ..	12 hours
Required: 98:058 and 9 additional hours in sociology ...	12 hours
Required: 97:025 and 6 additional hours in geography (excluding 97:010)	9 hours
	60 hours

1. The above program meets standards for teaching certification in the area of "All Social Studies" Grades 7-12.
2. It is strongly recommended that students who expect to teach geography with an "All Social Studies" certification take additional hours in geography.
3. Anthropology (99:xxx) courses and psychology (40:xxx) courses do not count toward this major.

Social Science Subject Field — Middle School/Junior High School Education Major*

Required: 90:190; 92:053; 94:014; 96:014 or 96:015; 97:025 or 97:010; 98:058	18 hours
Electives in no less than three of the above fields	12 hours
	30 hours

(*See Department of Curriculum and instruction, p. 68.)

General Courses in Social Science

90:010. Contemporary Affairs A — 1 hr.
May be repeated for credit.

90:030. Introduction to Urban Life — 3 hrs.
The American urban system and society; a transdisciplinary approach to how cities work, change and influence our society.

90:050. Introduction to Peace Studies — 1 hr.
Lectures and readings on the nature of personal and structural violence. The culture, political economy, and technology of war and peace.

90:051. Peace Studies II — 1 hr.
A study of current peace research with emphasis on proposed solutions to problems of war and violence in modern society.

90:070. Computers in the Social and Behavioral Sciences — 3 hrs.
Overview of computer applications in the Social and Behavioral Sciences. Includes hands-on introduction to use of statistical packages, word processing, and elementary programming in a language (e.g. BASIC). Course examines a variety of special computer applications, including database management, simulation, graphics displays, and real-time data collection using microcomputers. No previous experience with computers is necessary.

90:110. Contemporary Affairs B — 1 hr.
May be repeated for credit.

90:190. The Teaching of the Social Studies — 3 hrs.
Prerequisite: 12 hours in social science. Ordinarily should precede student teaching.

90:199(g). Study Tour, Europe — 6 hrs.
Residence study at leading European universities, followed by study tour of the Continent, including visits to historical and cultural centers.

90:199(g). Study Tour, Latin America — 6 hrs.
Six weeks' study in Latin America with emphasis on the social aspects of countries visited.

90:280. Social Science Seminar — 3 hrs.
May be repeated for a maximum of 6 hours. Prerequisite: departmental approval.

90:291. Problems in Teaching the Social Studies — 2 hrs.

90:297. Practicum.

90:299. Research.

Social Work

Brennen, Head. R. Anderson, M. Greene, T. Keefe, Maypole, McCullagh, Suh.

Social Work Major

Required: 45:040; 45:042; 45:085; 45:144; 45:163; 45:164; 45:184; 45:091; 45:192; either 45:193 or 45:195; 45:196	41 hours
Required: 98:080*; 40:120 or 31:055	6 hours
	47 hours

*40:049 or 80:072 may be substituted for 98:080.

No minor is required.

Social work majors must have a minimum G.P.A. of 2.0 in required courses to graduate with a Social Work Major. Students who graduate with a major in Social Work receive a Bachelor of Arts degree with a Social Work Certificate.

45:040. The American Social Welfare Institution — 3 hrs.
Historical development of social welfare services in the U.S., societal values and philosophies which underlie them, and the emergence of the profession of social work. Survey of present day social welfare systems, including the U.S. Social Security Act, and the problems with which they deal.

45:042. Social Services and Social Work — 3 hrs.
Legal aspects, goals, and values of the social work profession, and roles of the social worker in social service agencies; includes a volunteer experience in an agency. Prerequisites: 45:040; 98:060 (may be corequisite) or consent of instructor.

45:085. Research Methods in Social Relations — 3 hrs.
Prerequisites: 98:058; 98:080. (same as 98:085)

45:091. Social Work Practice I — 3 hrs.

Analysis of the principal social work methods — casework, group work and community organization. Prerequisites: 45:040; 45:042 (may be corequisite) or consent of instructor.

45:121(g). Mental Deviance and Mental Health Institutions — 3 hrs.

Prerequisites: junior standing; 98:060 or consent of instructor. (same as 98:121).

45:143. Stress and Stress Management in the Helping Professions — 3 hrs.

Stress and stress management for helping professionals and their clientele. Physiological, psychological, social and economic factors producing stress. Coping, management and prevention procedures. Prerequisite: junior standing.

45:144(g). Social Policies and Issues — 3 hrs.

Policy development and the consequences of policy for social welfare institutions. Frameworks for policy analysis. Planning, program design, and policy decisions for administration of social services. Prerequisites: 45:040; 45:142; or consent of instructor. Senior standing recommended.

45:163(g). Minority Group Relations — 3 hrs.

Prerequisite: 98:058. (same as 98:130)

45:164(g). Human Behavior and the Social Environment — 3 hrs.

Assessment of the applicability of various perspectives of human behavior to social work diagnosis, planning, and intervention; general systems theory serves as organizing framework. Student should have a strong base of courses in human behavior. Prerequisites: junior standing; 31:055 or 40:120.

45:171(g). Alcoholism — 3 hrs.

Social, legal, political, and ethical considerations surrounding the use and abuse of alcohol. Includes theories of causes and survey of social consequences; various interventive models tested in treating the alcoholic and evaluation of the effectiveness of the treatment approaches. Prerequisites: junior standing; 45:040 or consent of instructor.

45:172(g). Human Services Administration — 3 hrs.

Major concepts, principles, methods, and theories of administration of human services agencies, public and private. Application of systems theories to administration of these agencies. Prerequisites: junior standing; 45:040 or consent of instructor.

45:173(g). Social Services for the Aged — 3 hrs.

Social work practice and methods of delivering social service to the aged; critical analysis of current social programs, services, and legislation for the elderly person. Prerequisites: junior standing; 45:040 or consent of instructor.

45:174(g). Social Services in Health Care Settings — 3 hrs.

Includes psycho-social impacts of illnesses; roles and responsibilities of health care personnel. Prerequisites: junior standing; 45:040 or consent of instructor.

45:175(g). Child Welfare — 3 hrs.

Concepts and skills for intervention with families having problems — treatment modes for children and youth. Prerequisites: junior standing; 45:040 or consent of instructor.

45:184. Field Instruction — 11 hrs.

440 clock hours are required. May be taken: (1) 3 and one-half days a week on a semester basis; or (2) full time for 11 weeks during a semester; or (3) full time for 11 weeks during the summer. Prerequisites: 45:040; 45:042; 45:191; 45:192; or consent of instructor.

45:188. Advanced Field Instruction — 8 hrs.

Program for students who have completed the required Field Instruction hours in approved social work agency. Prerequisite: 45:184.

45:189. Readings in Social Work — 1-3 hrs.

Prerequisite: 6 hours in social work and departmental permission. May be repeated only with permission of department.

45:192. Social Work Practice II — 3 hrs.

Intermediate level, generic social work practice theory and skills; and task-centered intervention. Prerequisite: 45:091 or equivalent; or consent of instructor.

45:193(g). Therapeutic Communication — 3 hrs.

Human communication relevant to effective behavior change in the therapeutic relationship. Experiential learning in the core therapist facilitative conditions. Identification of critical therapist — helping person — and client variables which affect communication. Prerequisite: 45:192 or consent of instructor.

45:194. Integrative Seminar — 3 hrs.

Synthesis and analysis of salient topics and issues in social work practice. Prerequisites: junior standing; 45:091 or equivalent, or consent of instructor.

45:195(g). Family and Group Practice — 3 hrs.

Family, family network, and group work intervention skills. Prerequisite: 45:192 or consent of instructor.

45:196(g). Social Advocacy and Community Organization — 3 hrs.

Advanced study of the three branches of community organization (locality development, social planning and social action) at the local, state and national levels with a special emphasis on social advocacy. Prerequisite: 45:192 or consent of instructor.

45:285. Readings — 1-3 hrs.

Prerequisite: consent of instructor.

45:291. Advanced Direct Practice — 3 hrs.

Examination of advanced social work direct practice skills and techniques, and assessment of the social structural position of direct practice and the function and relevance of direct practice. Prerequisite: consent of instructor.

Sociology and Anthropology

*Durham, Head. Bartollas, *Brinthal, L. Callahan, Chadney, Claus, Cole, Ehrenreich, Hill, Kramer, Lutz, Noack, *R. Roberts, Stockdale.*

**on leave*

Sociology Major — Teaching

Required: 98:058; 98:060; 98:080; 98:085; 98:170;

90:190; 94:014; 92:053 24 hours

Electives in sociology 9 hours

33 hours

At least 15 hours of credit toward the major must be in 100-level courses.

Not more than nine (9) semester hours of credit from 98:145, 98:184, 98:189, and 98:198 may be applied toward the major.

Not more than six (6) semester hours of sociology taken within the Criminology/Corrections Minor may be counted also for credit on this major.

A minor is required, and it is strongly recommended that the minor be in another social science discipline.

Sociology Major

Required: 98:058; 98:060; 98:080; 98:085; 98:170;

92:053; 94:014 21 hours

Electives in sociology 15 hours

36 hours

At least 15 hours of credit toward the major must be in 100-level courses.

Not more than nine (9) semester hours of credit from 98:145, 98:184, 98:189, and 98:198 may be applied toward the major.

Not more than nine (9) semester hours of sociology taken within the Criminology/Corrections Minor may be counted also for credit on this major.

No minor is required.

Sociology Minor — Teaching and Liberal Arts

Required: 98:058; 98:060	6 hours
Electives in sociology	15 hours
	<u>21 hours</u>

Not more than nine (9) semester hours of credit from 98:145, 98:184, 98:189, and 98:198 may be applied toward the minor.

Not more than nine (9) semester hours of sociology taken within the Criminology/Corrections Minor may be counted also for credit on this minor.

Anthropology Major

Required: 99:010; 99:011; *98:080; 63:125	12 hours
Required: one of the following area courses: 99:132; 99:136; 99:137	3 hours
Electives in anthropology	12 hours
	<u>27 hours</u>

*40:049 or 80:172 may be substituted for 98:080.

No minor is required.

Anthropology Minor

Required: 99:010; 99:011	6 hours
Required: one of the following area courses: 99:132; 99:136; 99:137	3 hours
Electives in anthropology	6 hours
	<u>15 hours</u>

Criminology and Corrections Minor

Required: 98:122; 98:126; 98:127; 98:175	12 hours
Required: two or more of the following courses: 98:123; 98:130; 98:198; 45:121; 45:140; 45:144; 94:146; 94:148	5-9 hours
Electives in sociology or an approved area	0-3 hours
	<u>20-21 hours</u>

Note: Not more than nine (9) semester hours of sociology taken within the Criminology/Corrections minor may be counted for credit on both this minor and the liberal arts Sociology major or minor. Only six (6) sociology hours taken within this minor may be counted for credit on both the Sociology-Teaching major and this minor.

Not more than nine (9) semester hours of credit from 98:145, 98:184, 98:189, and 98:198 may be applied toward the minor.

Sociology

98:058. Principles of Sociology — 3 hrs.

A scientific approach to the analysis and understanding of culture, human groups and institutions, personality, self, and social control.

98:060. Social Problems — 3 hrs.

An analysis of the nature and range of social problems arising in modern industrial society. Consideration given to the conditions creating them and the methods by which society seeks to cope with them.

98:080. Statistics for Social Research — 3 hrs.

Introduction and application of statistical methods to problems in social research; classification and presentation of statistical data, measures of central tendency and variability, measures of relationships, linear correlation and regression, probability, hypothesis testing and statistical inference. Prerequisite: 80:020; 98:058 or 99:011 or 45:040.

98:085. Research Methods in Social Relations — 3 hrs.

Examination and application of methods of collecting, analyzing, and publishing sociological data. Prerequisites: 98:058; 98:080. (same as 45:085)

98:100(g). Individual Behavior — 3 hrs.

The development of individual conforming behavior; a systematic analysis of the individual socialization process through human interaction among persons, within primary groups, institutions, and the human community as a communication process. Prerequisite: 98:058.

98:101(g). Collective Behavior — 3 hrs.

The development of collective, non-conforming behavior; a systematic analysis of collective deviant, non-normative behavior in panic situations, crowds, masses, publics. The organization and behavior of sects, cults, interest groups. Social movements. The analysis of fads, fashions, crazes. The development of public opinion and propaganda. Prerequisite: 98:058.

98:105. The Family — 2 hrs.

The institutional aspects of family life. Prerequisite: 98:058.

98:110. Urban Sociology — 3 hrs.

An analysis of the nature, causes, and consequences of urbanization throughout the world; the growth and structure of metropolitan areas; social characteristics of urban populations. Prerequisite: 98:058.

98:111. Rural Sociology — 3 hrs.

Rural peoples; their communities and social institutions; relationship between country and city; the tide of social change, its problems and promises; world-wide perspective but with special emphasis on the United States. Prerequisite: 98:058.

98:114(g). Industrial Sociology — 3 hrs.

The study of individual and organizational behavior in work and production. The structure and function of work groups and formal work organizations in changing industrial society. Prerequisite: 98:058.

98:121(g). Mental Deviance and Mental Health Institutions — 3 hrs.

Study of the social factors associated with mental illness; its onset, the organizational context of its care and treatment, and its effects on various societal institutions. Prerequisite: 98:060 or consent of instructor. (same as 45:121)

98:122(g). Criminal Justice System — 3 hrs.

The genesis, transformation, and day-to-day operation of criminal justice within our society; emphasis on interrelationships between specific stages in the crime-control process and the differences between U.S. and other criminal justice systems. Prerequisite: 98:120 or consent of instructor.

98:123(g). Social Deviance and Control — 3 hrs.

Causes and consequences of socially disapproved behavior; role of social control agencies in recruitment of deviant identities, management of and reaction to deviance; dynamics of labelling processes and examination of the social meaning of non-normative behavior. Prerequisite: 98:060.

98:125(g). Social Gerontology — 3 hrs.

Personal, interpersonal, and societal factors in the human aging process; emphasis on family, community and governmental responsibility in defining and resolving problems of the aged in a modern industrial society. Prerequisites: 98:158; 98:060.

98:126(g). Corrections and Punishment — 3 hrs.

Punishment and correction in modern society, the changing relationship between the organization of society and the handling of criminal offenders; emphasis on character and functions of contemporary conditions, as well as alternative response to crime. Prerequisite: 98:120 or consent of instructor.

98:127. Juvenile Delinquency — 3 hrs.

Types of juvenile delinquents, causes of delinquent behavior, social institutions and their effect upon delinquency, prevention, and control of delinquent behavior. Prerequisite: 98:058 or 98:060. A student may not receive credit for both 98:120 and 98:127.

98:130(g). Minority Group Relations — 3 hrs.

A study of the interpersonal and social relations of minority groups within the larger American society, with special reference to Black-White relations. Prerequisite: 98:058. (same as 45:163)

98:135(g). Social Stratification — 3 hrs.

Origin, development and characteristics of social class and caste systems. Indices of class position, interaction between classes, social mobility, and theories of stratification. Prerequisite: 98:058.

98:136(g). Community Structure and Change — 3 hrs.

Critical analysis of approaches to studying community; examination of current and emerging community problems and patterns of change; analysis of relationships between community structure and the effectiveness of change strategies at the community level. Social stratification and social power and relationships among theory; research and action will be emphasized. Prerequisite: 98:058.

98:137(g). Social Policy and Policy Change — 3 hrs.

Definition of social policy; impact of social policy on social welfare institutions, social services, and people; frameworks for assessing policy in social work practice settings; their value and power basis, and vested interests served. Utilizes systems centered and problem centered models for assessing and changing policy derived from social work community organizations and social action practice to examine current policies relevant to social welfare and social work. Junior standing required.

98:144(g). Population — 3 hrs.

Comparative study of population composition, growth, and major trends throughout the world; includes fertility, migration, and mortality. Introduction to techniques of populations analysis; theories of population change, and problems of population policies. Prerequisite: 98:058.

98:145(g). Research Experience in Sociology — 1-3 hrs.

Research participation and/or independent supervised research. Prerequisite: 15 semester hours in sociology including 98:080 and 98:085, and consent of instructor. May be repeated for up to 6 hours of credit.

98:148(g). Environmental Sociology — 3 hrs.

Issues of resource depletion and environmental degradation examined from a socio-ecological perspective. Interaction between these problems and patterns of social organization, and impacts of these problems on quality of life are emphasized. Prerequisites: 98:058; junior standing.

98:150(g). Sociology of Conflict — 3 hrs.

Past and current theories of human aggression, competition; rational and nonrational conflict, as well as mass and individual violence. Special attention given to social determinants of conflict. Prerequisite: 98:058.

98:156(g). Social Movements — 3 hrs.

Sociological and socio-psychological conceptualizations of the genesis, dynamics, and demise of modern social movements. Stress is given to reformist, utopian, nativistic, and totalitarian organizations. Prerequisite: 98:058.

98:160(g). Social Data Analysis — 3 hrs.

Intermediate methods of analysis using standard computer software program packages; includes descriptive and inferential statistics with controlled relationships, multivariate analysis, and scale analysis techniques. Primary orientation to survey data in social sciences. Prerequisites: 98:080 or equivalent; junior standing.

98:170(g). The Development of Modern Social Theories — 3 hrs.

Summary and critical appraisal of the growth of sociological thought; historical consideration of social philosophy; introduction of leading sociological thinkers and their theories of society. Prerequisite: 98:058.

98:172(g). Sociology of Religion — 3 hrs.

Examination of the social bases of religious institutions; factors in religious evolution and change; comparative analysis of religious organizations and religious behavior; functions of religion in the social structure. Prerequisite: 98:058.

98:173(g). Alienation — 3 hrs.

An exegesis of the concept of alienation as conceived by Hegel, Marx, and current sociologists; emphasis on industrialism, the division of labor and its relationship to social reification, mystification, and objectification. Prerequisite: 98:058.

98:174(g). Ethnographic Interviewing — 3 hrs.

Practical application of qualitative techniques in the Social Science interview; includes construction of descriptive questions, domain analysis, taxonomic and componential analysis. Prerequisites: 98:058 or 99:011 and junior standing or consent of instructor.

98:175(g). Theory and Criminal Justice — 3 hrs.

Analysis of crime and its effect upon society; examination of theoretical models undergirding the prevention and control of criminal behavior; and model-building exercises on the justice system. Prerequisite: 98:127 or equivalent.

98:176(g). Social Change — 3 hrs.

Nature of social change and its implications for personality and society. Prerequisite: 98:058.

98:180(g). Seminar in Sociology — 1-3 hrs.

Selected topics; provides opportunity to correlate previous course work and knowledge in field of sociology. Topic for specific semester listed in Schedule of Classes. Prerequisite: 15 semester hours in sociology or consent of instructor. May be repeated for up to 6 hours of credit.

98:184(g). Experience in Applied Sociology — 3-6 hrs.

Work experience in applied sociology. Consultation with instructor required prior to registration. Prerequisites: 12 semester hours in sociology and consent of instructor. Must be taken on ungraded (credit/no credit) basis.

98:189(g). Readings in Sociology — 1-3 hrs.

Prerequisite: 9 hours in sociology and departmental permission. May be repeated only with approval of department.

98:200. Contemporary Sociology Theory — 3 hrs.

Description and analysis of the main currents in contemporary sociological thought; principal sociological theorists; major themes, schools, trends, issues, and debates in theory. Prerequisite: 98:170. Open to seniors with consent of department head.

98:201. Advanced Research Methodology — 3 hrs.

Relationship between theory and research, grand methodology; logic and philosophy of sociology; science and sociology; theory construction, formal models, explanation, prediction and cause; value freedom, objectivity and ideology. Prerequisite: 98:085. Open to senior students with consent of department head.

98:280. Seminar in Sociology — 3 hrs.

Seminars are offered in special topics: such as Sociological Theory, Deviant Behavior, Social Psychology, Social Stratification, Population, Sociological Research, Sociology of Religion, and others. The topic to be used for a specific semester will be listed in the Schedule of Classes. An advanced course in the specific area scheduled will be considered a prerequisite to that seminar. Enrollment in different topics is not limited, but a student should not enroll in two seminars on the same topic.

98:285. Individual Readings — 1-3 hrs.

98:297. Practicum.

98:299. Research.

Anthropology

99:010. Human Origins — 3 hrs.

Introduction to the physical and prehistoric development of humankind, including primate and human evolution, modern races, and the archaeological cultures of the world.

99:011. Culture, Nature, and Society — 3 hrs.

Introduction to the anthropological analysis of man's cultures, including a brief survey of the cultures of the world and theoretical approaches anthropologists use in order to study them. Also a brief introduction to anthropological linguistics.

99:132. North American Indians — 3 hrs.

Ethnographic survey of the sociocultural systems developed by native Americans north of Mexico; emphasizes the relationships that exist among ecological factors, subsistence techniques, social organizations, and belief systems.

99:136(g). Social Anthropology of India — 3 hrs.

The social organization of India with particular reference to contemporary village life. Prerequisite: 99:011 or 68:125 or consent of instructor.

99:137. South American Indians — 3 hrs.

Ethnographic survey of the sociocultural systems developed by foraging and horticultural peoples of South America; emphasizes relationships that exist among ecological factors, subsistence techniques, social organizations, and belief systems.

99:142(g). Archaeology of North America — 3 hrs.

The archaeology of North America and its relationship to Asia and Central and South America; the fossil and cultural evidence, and its interpretation. Prerequisite: 99:010 or consent of instructor.

99:143(g). The Rise of Civilization — 3 hrs.

Comparative analysis of Andean, Mesoamerican, Middle Eastern, and other prehistoric civilizations; "Moundbuilders" and Megalithic cultures on the margins of civilization. Testing cultural evolution theory via major trends in prehistory. Prerequisite: 99:010 and junior standing, or consent of instructor.

99:151. Biomedical Anthropology — 3 hrs.

Human evolution and adaptation. Analysis of human fossils, human genetics, and present-day biological diversity. Prerequisite: 99:010 or consent of instructor.

99:152(g). Human Variability — 3 hrs.

Methods of determining biological similarities and differences in human populations; anthropometric techniques to analyze human blood groups, gene markers, dental configurations, dermatoglyphics and human races. Prerequisites: 99:151 and junior standing, or consent of instructor.

99:153(g). Primate Behavior — 3 hrs.

Introduction to the social behavior and ecology of prosimians, monkeys and apes. Although laboratory and zoo studies will be covered, the emphasis will be on primate behavior in natural settings. Prerequisite: 99:010, junior standing, or consent of instructor.

99:160(g). Psychological Anthropology — 3 hrs.

Psychological dimensions of sociocultural systems considered in a comparative perspective. Includes historical development and logical status of the field, personality in sociocultural contexts, cognitive anthropology, and other issues in ethnopsychology and ethnopsychiatry. Prerequisite: 99:011 or consent of instructor.

99:161(g). Religion, Magic, and Witchcraft — 3 hrs.

Anthropological understanding of behavior dealing with the supernatural; supernatural beliefs, practices, and movements throughout the world. Prerequisite: 99:011 or consent of instructor.

99:163(g). Social Organization of Primitive Peoples — 3 hrs.

Varieties of social structure in selected nonliterate societies. Role of kinship, age, sex, environment, economics and religion in determining relations between individuals and groups. Prerequisite: 99:011.

99:164(g). Cultural Ecology — 3 hrs.

Relationships among environment, human biology, and culture. Successes and failures in cultural adaptation. Social sources of environmental crisis in pre-industrial and industrial societies. Prerequisite: 99:011 or consent of instructor.

99:165. Underdevelopment, Development, and Change — 3 hrs.

Definitions and theories of underdevelopment applied to social formations of the Third World and subcultural groups of the United States. Considers poverty, peasant conservatism development and change strategies. Prerequisite: 99:011 or consent of instructor.

99:166. Ethnic and Race Relations — 3 hrs.

Current problems relating to race and ethnicity in both underdeveloped and developed societies. Prerequisite: 99:011 or consent of instructor.

99:167. Urban Anthropology — 3 hrs.

Urbanism and urbanization in cross-cultural perspective; urban structures, urban migration, and process of adaptation to urban environments. Prerequisite: 99:011 or consent of instructor.

99:168(g). Culture, Disease, and Healing — 3 hrs.

Cross-culture consideration of cultural, biological, and ecological factors in disease and health; including disease and evolution, folk healers and non-western medical systems, health care systems in the U.S., and relevance of medical anthropology to contemporary problems. Prerequisites: 99:011 and junior standing; or consent of instructor.

99:169(g). Drugs, Rituals, and Altered States of Consciousness — 3 hrs.

A biocultural approach to possession, trance, dream, and drug-induced states in selected societies. Alcohol use and abuse are examined in detail. Prerequisites: 99:011 and junior standing; or consent of instructor.

99:171(g). Methods in Archaeology — 3 hrs.

Archaeological field and laboratory techniques; including both methodological and theoretical aspects. Prerequisites: 99:010; and 3 hours of 100-level archaeology credit or consent of instructor.

99:172(g). Archaeological Fieldwork — 8 hrs.

Field school: field research techniques, hypothesis testing, scientific problem solving. Data recovery and analysis, laboratory processing, mapping, archaeology and public policy, cultural resource management. Prerequisites: 99:010; junior standing; and consent of instructor.

99:174(g). Ethnographic Interviewing — 3 hrs.

Practical application of qualitative techniques in the Social Science interview; includes construction of descriptive questions, domain analysis, taxonomic and componential analysis. Prerequisites: 98:058 or 99:011 and junior standing or consent of instructor.

99:176(g). Anthropological Theory — 3 hrs.

Major theoretical developments in anthropology, including both historical and contemporary schools and trends. Prerequisites: 99:011 and junior standing or consent of instructor.

99:178(g). Research Methods in Cultural Anthropology — 3 hrs.

Provides basic knowledge of the descriptive and analytic techniques used by cultural anthropologists in the study of both preindustrial and industrial science. Prerequisite: 99:011 or consent of instructor.

99:180(g). Seminar in Anthropology — 3 hrs.

Selected problems within one of the subfields of anthropology (cultural, physical, archaeology, or anthropological linguistics). Topic for a specific semester to be listed in the Schedule of Classes. Prerequisites will vary with the topic. May be repeated for credit.

99:189(g). Readings in Anthropology — 1-3 hrs.

Prerequisite: 9 hours in anthropology and departmental permission. May be repeated only with permission of department.

99:198. Independent Study.

Special Education

M. Thompson, Head. R.J. Anderson, Callahan, Courtnage, Etscheidt, Frudden, Hamre-Nietupski, Little, Nietupski, Raschke, S. Stainback, W. Stainback.

Early Childhood Education Major — Special Education Emphasis

This major leads to certification for teaching in nursery school and kindergarten only. The student will complete the General Education requirements, the Common Professional Sequence, the specified major requirements, a Professional Semester, plus electives to complete a minimum of 130 hours. The prescribed program is as follows:

Major requirements: 20:109; 21:044; 21:149; 21:154;

42:045 12 hours
Professional Semester: 21:105; 21:192; 23:110 17 hours

To be taken simultaneously during the semester immediately preceding the Student Teaching. A 2.15 grade index in all course work attempted at the University of Northern Iowa and, also, a 2.15 g.p.a. on all course work attempted at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction, is required to take the Professional Semester.

Within the student's total program (including General Education) at least one course in each of these fields should be included: art, mathematics, music, science, sociology or anthropology, speech or speech pathology. A student must take a course in American history or American government and a course in Human Relations for certification.

The student should include, also, a concentration of at least 15 semester hours in one of the following areas: art and industrial arts, English and speech, health and physical education, mathematics, a modern foreign language, music, science, or social science.

A student who wishes to be certified for elementary grades above the kindergarten should include the following work in addition to the required work listed above.

a course in geography, one in English, an elective in reading, and 21:152; 80:134, and 4 hours of 28:134.

Preschool Handicapped Emphasis

The student may enroll in either (y) or (z) sections of courses so marked in the Schedule of Classes and will fulfill the regular student teaching requirements at the early childhood level. Requirements are:

Required: 22:050 or 22:150; 22:170; 22:174 8 hours
Required: 22:171; 22:183; 22:187; 22:192; 22:153 18 hours
26 hours

Elementary Education Major — Special Education Emphases

The student will complete the General Education requirements, the Common Professional Sequence, a Professional Semester, the major requirements, the emphasis requirements, as indicated, and electives to complete a minimum of 130 hours. The prescribed program is as follows:

Major requirements: 20:100; 21:044; 22:150; 24:031;
or 24:131; 42:045; 2- or 3-hour elective in reading
..... 15-16 hours

Professional Semester: 21:101; 23:110; 80:134 ... 17 hours

To be taken simultaneously during the semester immediately preceding Student Teaching by all elementary education majors except those with an emphasis in Reading. A 2.15 grade index on all work attempted at the University of Northern Iowa and, also, a 2.15 g.p.a. on all course work attempted at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction, is required to take the professional semester.

The total program (including General Education) should be planned by the students to include some course work in each of these fields: art, English, geography, mathematics, music, science, and speech or speech pathology. A student must take a course in Human Relations and a course in American history or American government for certification.

Preschool Handicapped Emphasis

The student may enroll in either (y) or (z) sections of courses so marked in the Schedule of Classes and will fulfill the regular student teaching requirements at both the elementary and early childhood levels. Completion of the emphasis qualifies the student for Early Childhood Endorsement 53.

Required: 22:050 or 22:150; 22:174 8 hours
Required: 22:153; 22:171; 22:183; 22:187; 22:192;
20:109; 21:149; 21:151; 21:154; 21:192;
28:132 31-34 hours
Required: one course in sociology or
anthropology 2-3 hours
41-45 hours

Special Education Emphasis

The student may enroll in either (y) or (z) sections of courses so marked in the Schedule of Classes and will fulfill the regular student teaching requirements at either the lower or upper elementary level. Requirements are as follows:

Required: 22:170; 22:171; 22:174; 22:185; 22:192-
Tutorial 12 hours
Required: two courses from 22:180; 22:182;
22:183; 22:187 6 hours
Required: 22:192-Emotionally Disturbed or
Mentally Retarded (chosen from one area: Pre-
academic, Primary, or Intermediate) 3 hours
Required: 28:135* 4 hours
25 hours

*28:135 must be in a different category (i.e., Mental Retardation or Emotional Disabilities) than the 22:192 experience.

(See Curriculum and Instruction, page 67, for other emphases under this major.)

Education of the Handicapped — Secondary Level Minor

Required: 22:150; 22:174; 22:170; 22:171; 22:181;
22:182; 22:185 17 hours
Required: 28:135 4 hours
Required: 22:192 (three hours each of tutorial and
secondary experience) 6 hours
27 hours

Unless otherwise noted, all 22:xxx courses require written approval of the head of the Department of Special Education as prerequisite.

22:050. Introduction to Exceptional Persons — 3 hrs.

Overview of the field of Special Education including historical perspective, characteristics, programs and legal provisions for education of the handicapped.

22:150(g). The Exceptional Child — 3 hrs.

Introduction to education of the handicapped and gifted child; the exceptional child in the regular school setting; development of proper understanding and attitudes. Emphasis on needs, curriculum, and special education program. Written approval of division not prerequisite. Students may not earn credit for both 22:050 and 22:150.

22:153(g). Classroom Adaptations for Children with Physical Disabilities — 3 hrs.

Instructional programs, classroom procedures, and equipment modification for handicapped students in educational settings. Prerequisite: 22:050 or 22:150; or consent of instructor.

22:161(g). Braille I — 3 hrs.

Braille reading and writing for the education of blind children. Use of Braille writing equipment. Reading problems; observations of blind children; Braille in mathematics and music.

22:162(g). Braille II — 3 hrs.

Advanced applications of Braille I, leading to Library of Congress certification for Braille transcribers; introduction to Nemeth code, Cranmex abacus, and teaching materials and equipment. Prerequisite: 22:161.

22:170(g). Educational Management of the Handicapped I — 3 hrs.

Prescription, implementation, and evaluation of educational solutions for students manifesting learning and behavioral disorders. Prerequisite: 22:150. Corequisite: 22:192 (tutorial); 22:174.

22:171(g). Educational Management of the Handicapped II — 3 hrs.

Educational management of the handicapped in group settings. Stress upon discipline and management techniques. Prerequisite: 22:170; corequisite: 22:180; 22:182; or 22:183; 22:192.

22:174(g). Teaching the Handicapped — 2 hrs.

Overview of instructional programs for the handicapped from preschool through secondary levels. Lab. experience in the selection and evaluation of curriculum methods and materials. Prerequisite: 22:150. Corequisite: 22:170; 22:192 (tutorial).

22:180(g). Teaching the Handicapped: Primary — 3 hrs.

Instructional methods and materials for handicapped functioning at primary level. Emphasis on social and beginning academic skills. Includes teaching of retarded, learning disordered, and/or behaviorally handicapped individuals. Prerequisites: 22:170; 22:174; 22:192 (tutorial).

22:181(g). Teaching the Handicapped: Secondary — 3 hrs.

Emphasis on individual instruction programmed materials, and other techniques to improve academic, social, and vocational skills. Includes teaching of mildly retarded, learning disordered and/or behaviorally handicapped pupils. Prerequisites: 22:270; 22:174; 22:192 (tutorial).

22:182(g). Teaching the Handicapped: Intermediate — 3 hrs.

Instructional methods and materials for the handicapped functioning at intermediate level. Emphasis on acquisition of social and academic skills. Includes teaching the mildly retarded, learning disordered, and/or behaviorally handicapped individuals. Prerequisites: 22:170; 22:174; 22:192 (tutorial).

22:183(g). Teaching the Handicapped: Preacademic/Preschool — 3 hrs.

Instructional methods and materials for the handicapped functioning at the preschool or preacademic level. This may include teaching the trainable mentally retarded, severely brain injured, psychotic, and other handicapped pupils. Prerequisites: 22:170; 22:174; 22:192 (tutorial).

22:184(g). Home-School Relationships for Special Education — 3 hrs.

Utilization and coordination of special education services with the home and school to maximize the potential of the handicapped. Communication techniques and patterns of cooperation with parents and school personnel; guidance and counseling of the handicapped child and his parents. For seniors and graduate students only.

22:185(g). Readings in Special Education — 1-2 hrs.

Reading and discussion of current methodological developments and innovations in special education. Recommended concurrent enrollment with 22:170, 22:174, and 22:192 (individual instruction). May be repeated once for a maximum of 2 hours credit.

22:187(g). Teaching the Handicapped: Profound — 3 hrs.

Instructional methods and materials for handicapped children functioning at developmental ages 0-3. Emphasis on definitions, characteristics, educational programs and adaptations. Includes teaching of children with severe or profound mental, physical and/or health problems. Prerequisite: 22:170; 22:174; 22:192 (tutorial).

22:192(g). Experience in Special Education — 3 hrs.

Supervised teaching and experience in specialized areas of reading or special education as listed in the Schedule of Classes. May be repeated in a different area for a maximum of 9 hours with consent of the instructor. Prerequisites vary with the specific experience. Corequisite: 22:170 or 22:171.

22:240. The Consultation Process in Special Education — 3 hrs.

Examination, analysis, and application of a methodological model for consulting with teachers of handicapped children. Emphasis on process considerations including interpersonal relations, interaction patterns, interpersonal influence and effect of responses, and communication skills.

22:245. Resource Strategies for the Handicapped — 3 hrs.

Prompting techniques, concept teaching, a principle format for analyzing/ designing instruction, systematic development of strategies, and in-service training considerations. Principles and techniques of educational diagnosis, instructional analysis, and instructional strategy design as these relate to the consultation process in special education.

22:251. Vocational Programs for the Handicapped — 3 hrs.

Development and implementation of work study and other vocational programs for handicapped adolescents and adults. Prerequisite: 22:181.

22:252. Community Resources for Special Education — 3 hrs.

Study of cooperation and coordination of the school and other agencies serving the handicapped, including various programs and services provided by governmental and private organizations.

22:254. Vocational Assessment of the Handicapped — 2 hrs.

Basic assessment techniques for professional working with handicapped adolescent or adult; requires application of these techniques in work with handicapped. Designed for those interested in vocational programming for the handicapped. Prerequisite: 22:251 or consent of instructor.

22:255. Assessment and Programming for the Preschool Handicapped — 3 hrs.

Administration and use of instruments that measure progress in cognitive, language, motor, social/affective, and self-help developmental domains. Implications for programming and intervening discussed. Prerequisite: 22:183.

22:278. Administration of Special Education — 3 hrs.

Prepares administrators to plan programs for various areas of special education, to select personnel, provide instructional materials, interpret the program to the community, and be informed concerning legal provisions for special education.

22:289. Seminar — 3 hrs.

Prerequisites: 22:171; 22:180, 22:181, 22:182, 22:183, or 22:187; 22:192. May be repeated on different topics for a maximum of 9 hours.

22:290. Practicum — 3-6 hrs.

Prerequisites: 22:171; 22:180, 22:181, 22:182, 22:183, or 22:187; 22:192. May be repeated for a maximum of 9 hours.

22:299. Research — 2-3 hrs.

May be repeated for a maximum of 6 hours.

Student Field Experiences

Mahlis, Director. Doerzman, Eggers, Engstrom, Fratianni, Hawkes, Kuehl, Lynch, Roberson, Schwaab, Stahlhut, Stewart, J.M. Wedman.

The Office of Student Field Experiences administers the university's program in student teaching which is required of all undergraduates seeking a teaching degree. The student teaching program is administered through the office of the Dean of the College of Education and is under the supervision of the Director of Student Field Experiences and the jurisdiction of the Dean of the College of Education.

Completion of the present undergraduate teaching curriculum requires a minimum of 8 semester hours of credit in student teaching for all teacher education majors except for those who have earned credit in student teaching in another college or university. Student teaching credit earned in other colleges or universities does not completely fulfill the student teaching requirements of the University of Northern Iowa. Students who have completed 3 semester hours of credit or more in student teaching in another college or university in the same areas as their major at the University of Northern Iowa will be held for at least 4 semester hours of student teaching at this university. Students who have completed either the old, two-year curriculum or the two-year plan and desire to fulfill the teaching program requirements for a baccalaureate degree are required to complete additional student teaching only if they major in an area other than early childhood, lower, or upper elementary teaching.

Teacher education majors seeking a second (dual) endorsement (i.e., early childhood/elementary, elementary/early childhood, elementary/special education, elementary/secondary, secondary/elementary, elementary/special area, or special area/elementary) must complete a minimum of 12 semester hours of credit, in the sequence of eight plus four (8 + 4) when possible, as their initial requirement, and must have the approval of their major department(s).

All teacher education majors have the option of completing additional student teaching beyond the minimum of 8 or 12 hours required for graduation. Teacher education majors who exercise the option to complete elective hours beyond the minimum requirement in student teaching (8 or 12 hours) do not need approval by their major department(s).

Student teaching generally is offered in blocks of 8, 12, or 16 credit hours. The student who registers for 12 credit hours must complete 8 hours of student teaching on a full-time basis and the additional 4 hours of credit on a full-time basis for a minimum of four (4) weeks or on a half-time basis for a half semester. The student who registers for 16 credit hours of student teaching must complete a semester of student teaching on a full-time basis.

Elementary majors with an emphasis in special education must complete 8 credit hours of student teaching in a regular elementary classroom plus at least 4 credit hours of student teaching in a special education setting in this sequence, when possible. The special education student teaching must be in a different category (i.e., mental disabilities or emotional disabilities) than the 22:192 Experience in Special Education (see page 141).

Safety Education and Psychology majors must complete a teaching minor and are urged to do some student teaching in the minor field of preparation when fulfilling their major student teaching assignment. Secondary double majors are urged to do some student teaching in both subject fields.

Special area majors (i.e., art, health, music, physical education, and speech pathology) receive kindergarten-12 endorsement. They are required to complete 8 semester hours of student teaching in the

special subject area. Special area majors must complete some student teaching at both the elementary and secondary school levels.

Double majors, elementary majors with an emphasis in special education, and special area majors are encouraged to complete a semester of student teaching.

Teacher education majors may apply up to 16 credit hours of student teaching toward the 130-hour minimum required for graduation. Approval of the Teacher Education Coordinating Council (TECC) and Standards, the major department(s), and the Dean of the College of Education is required of each student seeking permission to fulfill the minimum requirement of 8 or 12 hours of credit in student teaching. Teacher education majors who complete elective hours beyond the minimum credit hours required in student teaching must have approval of TECC and the Dean of the College of Education.

The primary purpose of student teaching is to provide the student the opportunity to experience, in depth, the full role and meaning of teaching in a real school setting. Specific emphasis is given to (1) the analysis of teaching and learning, (2) the pre-conditions of learning, (3) the organization of instructional content, (4) adapting methods and techniques to organization and content, (5) the logical process of teaching, and (6) principles of self-evaluation. This broad pattern of experiences, provided in either the campus laboratory school or off-campus affiliated schools, includes planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program.

The optional, full-semester, student teaching experience (16 credit hours) focuses upon providing greater depth and breadth of experiences. It is designed to meet the needs and interests of the student, and to provide a broader understanding of the school in contemporary society.

A student teacher who withdraws from student teaching (28:1xx) prior to the midpoint of either the 8-credit-hour or the 4-credit-hour student teaching term will receive a *W (Withdrawn)*. However, a student teacher who withdraws from student teaching (28:1xx) after the midpoint of the student teaching term will receive a *no-credit* grade if the evaluation indicates that the student has not demonstrated competence during student teaching. A student who demonstrates competence but decides to withdraw at anytime will receive a *W*.

The applicant for student teaching who previously received a *no-credit* grade in 28:1xx must be recommended for placement to the Teacher Education Coordinating Council (TECC) by the Director of Student Field Experiences following consultation with the coordinator who gave the *no-credit* grade and the head of the major department(s). Approval by TECC is required for placement.

The scholarship average required before a student is permitted to register for student teaching is specified on page 44 and is the same as that required for graduation (see page 29). A student must also have been approved on a teacher-education program and must file an application for student teaching no less than 90 days prior to the beginning of the semester in which the work is to be taken. Pertinent announcements are made through the university newspaper and bulletin boards.

28:132. Early Childhood Teaching.

Prerequisite: Common Professional Sequence (Levels I and II), Professional Semester, and approval of major department.

28:134. Lower Elementary Teaching.

Prerequisite: Common Professional Sequence (Levels I and II), Professional Semester, and approval of major department.

28:135. Special Education Teaching.

Limited to those who are approved for special education. Prerequisite: Common Professional Sequence (Levels I and II). Professional Semester, 8 hours of student teaching credit in a regular classroom, and approval of major department.

28:136. Upper Elementary Teaching.

Prerequisite: Common Professional Sequence (Levels I and II), Professional Semester, and approval of major department.

28:137. Middle School/Junior High School Teaching.

Students should have completed the special methods course in their subject field before student teaching. Prerequisite: Common Professional Sequence (Levels I and II), Professional Semester, and approval of major department.

28:138. Secondary School Teaching.

Students should have completed the special methods course in their major field of preparation before student teaching. Prerequisite: Common Professional Sequence (Levels I and II), and approval of major department.

28:139. Vocational-Technical Teaching.

Required to teach in area vocational schools and community colleges. Prerequisite: Common Professional Sequence (Levels I and II), and approval of major department. Student should have completed special methods course in his major field.

28:140. Special Area Teaching: Art, Library Science, Music, Physical Education, and Speech Pathology.

Required to teach in kindergarten and grades one through fourteen. Students should have completed special methods course in their major field. Prerequisite: Common Professional Sequence (Levels I and II), and approval of major department.

28:150. Laboratory Practice — Elementary(*).**28:151. Laboratory Practice — Secondary(*).**

(*) For experienced teachers (*elementary or secondary, as appropriate) who have not fulfilled the student teaching requirements for certification and to provide a depth in experience. Includes practice in modern teaching procedures, construction and use of classroom instructional materials, analysis of the teaching-learning process, meeting needs of exceptional children, classroom supervision, and school-parent relations. Special seminar arranged. Departmental recommendation and approval required.

28:250. Advanced Laboratory Practice — 2-4 hrs.

Student may concentrate on any aspect of the school program, such as curriculum, methods, evaluation, remedial instruction, guidance, supervision, administration, public school relations, educational media and audio-visual aids, and extra-class activities. May be repeated for a total of 4 hours. Approval of the Director of Student Field Experiences required.

Teaching

R. Nielsen, Head. Aldrich, J. Becker, Beckman, Betterton, Blaga, Bollwinkel, Boothby, Briggs, Brooks, Butzier, Christensen, Cooney, Darrow, Davidson, J. Diamond, Doud, J.M. Duea, J.E. Duea, Ellis, Findlay, Finkelstein, Finsand, Geadelmann, Gleissner, Hale, Hanna, J. Hantula, Harris, Heshusius, Hines, J. Kelly, Kettner, Kirkland, Larsen, R.E. Lee, Lubinski, McClain, McIntyre, Mazula, C. Moore, Myers, P. Nelson, L. Nielsen, Ockenga, L. Oukada, Parisho, Paulson, Potter, Primrose, Riechmann, Rinkel, S. Rose, Schwandt, Shaw, R. Strub, E. Strub, Struck, Swann, Tarr, N. Teig, Tephly, Vargas, Voltmer, P. Waack, W. Waack, Welch, Wiederanders, Wolfe, Yoder.

The Department of Teaching is responsible for the administration of the multi-faceted programs of Malcolm Price Laboratory School. The school conducts a program of instruction for approximately 700 pupils enrolled in grades N K through 12. The pupils primarily are residents of Cedar Falls and Waterloo and provide a rich, multi-cultural, public school setting which enables the Laboratory School to respond fully to its university responsibilities. The school offers a comprehensive program of studies and activities. It is a member of the Area 7 Education Agency, and is accredited by the Iowa Department of Public Instruction and the North Central Association of Colleges and Schools.

The Laboratory School holds departmental status within the College of Education. It serves three major functions for the university and the state of Iowa:

1. As a teacher education laboratory, the school provides a variety of direct clinical and classroom experiences for students from all departments of the university as they prepare to enter the teaching profession. Members of the faculty supervise and direct these experiences and, in addition, teach university courses both on and off campus.
2. As a center for experimentation and research, the school is heavily involved in the writing of classroom instructional materials and the development of instructional methods and school curricula. Faculty members work together in project teams, frequently cooperating with colleagues across the university campus, at other Regents institutions, and with the Department of Public Instruction.
3. As an agent of leadership to Iowa elementary and secondary schools, the Laboratory School regularly sponsors conferences and workshops, participates in the activities of professional organizations, provides extension and consultant services, teaches off-campus extension courses, and cooperates with local and state agencies in faculty development and in-service activities.

Interdisciplinary Courses, Majors and Minors

The university offers a variety of interdisciplinary curricula to meet the growing need and interest in work beyond collegiate division. The following courses and programs are under the supervision and jurisdiction of several committees, departments, or colleges as indicated. The courses and programs include:

Human Relations Courses
Humanities Courses
Humanities Major
Humanities Minor
American Studies Major
Asian Studies Major — Teaching
Asian Studies Minor
Latin American Studies Major
Russian Area Studies Major
Individual Studies Major
General Studies Major
Environmental Perceptions Minor
Women's Studies Minor

Human Relations

The courses in Human Relations are required for teacher certification by the Iowa State Department of Public Instruction. The courses are interdisciplinary and are under the supervision and jurisdiction of the Dean of the College of Education.

01:070. Human Relations: Awareness and Application — 3 hrs.

Development of awareness of various societal subgroups, recognizing and dealing with dehumanizing biases (e.g., sexism and racism), and learning to relate effectively to various groups in order to foster respect for human diversity. Emphasis on self-awareness in human relations issues and how these awarenesses can be translated into positive relationships with others.

Humanities

There is no humanities department as such. The courses below are interdisciplinary and are taught jointly by staff from several departments.

68:021. Humanities I — 4 hrs.

Literature, philosophy, religion, and the fine arts, integrated with the history of Western Civilization (ancient times through the reformation).

68:022. Humanities II — 4 hrs.

A continuation of 68:021 (from the 17th century to the present).

68:040. Women's Studies: Introduction — 3 hrs.

An interdisciplinary approach to the study of Feminism and those aspects of sex-role stereotyping and socialization in institutions, programs, and curricula which prevent sex-fair treatment for all.

68:102(g). Non-Verbal Communication — 3 hrs.

Patterns of human expression apart from the spoken or written word. (Same as 50:102.)

68:124. Foreign Area Studies — China — 3 hrs.

A historical treatment of significant elements of Chinese culture and major aspects of modern China's transformations since the mid-nineteenth century.

68:125. Foreign Area Studies — India — 3 hrs.

A historical treatment of significant elements of Indian culture and major aspects of modern India's transformation under British rule and since independence.

68:127. Foreign Area Studies: Middle East — 3 hrs.

An interdisciplinary examination of significant elements of Middle East culture and society, its current patterns, tensions, and contributions.

68:128. Foreign Area Studies: Africa — 3 hrs.

An interdisciplinary examination of contemporary African society and culture, its historical heritage, its problems, prospects, and importance.

68:130. Culture of the Ghetto — 3 hrs.

Various aspects of the black experience: economics, psychology, education, sociology. Provides the student an opportunity to meet blacks from all walks of life, to travel to various ghettos in the country, to work with black children. May be repeated for an additional 3 hours of credit.

68:131. Practical Experience in Ghetto Living — 2 hrs.

Student to spend at least 5 hours a week working in a ghetto on a self-optional or assigned project; may include work in public school system, volunteer bureaus, and/or community social agencies. Project to be approved by the instructor at time of enrollment. Prerequisite or corequisite: 68:130. May be repeated for an additional 2 hours of credit.

68:165(g). Tragedy — 3 hrs.

The interpretation of classical, Christian, and modern works portraying the human encounter with suffering and death.

68:167. The Uses of the Humanities in Becoming Human — 3 hrs.

Using a mixture of films, text, interdisciplinary readings and class discussion, this course investigates specific uses of the humanities in the art of living.

68:168. Mythology — 3 hrs.

Study of primitive and sophisticated examples of myth and mythopoetic thinking from a variety of cultures; emphasis on how myths function in art, society, and the individual.

68:189(g). Seminar in Environmental Problems — 3 hrs.

Experience in environmental problem solving of both a theoretical and practical nature. Prerequisite: consent of instructor.

68:194(g). Seminar on Death and Dying — 3 hrs.

Ideas and research concerning the anticipation of dying, toward the goal of sensitive communication with those most affected by death — the suicidal, the terminally ill, and the grieving.

68:198. Independent Study.

(See pp. 36, 48.)

Humanities Major

This is an interdisciplinary major offered by the College of Humanities and Fine Arts, and is under the jurisdiction of the dean of that college.

Required: 68:021; 68:022 8 hours

*Interdisciplinary courses in, or including, the

Humanities 9 hours

Courses in history, from any department 6 hours

Critical and analytical courses 6 hours

Participatory courses in creative or performing arts .. 6 hours

Electives in any of the above or other Humanities areas . 9 hours

44 hours

*These courses may include seminars in the interpretation of texts, in philosophy of history, in aesthetics, in a theme or period, in a topic relating the Humanities to the natural or social sciences, or other appropriate courses as available.

It is recommended that at least three courses center on the same chronological period. At least two courses should focus on the contemporary period; at least two outside the contemporary period.

It is recommended, also, that at least four courses be integrated by being in the same academic discipline or by dealing with a common theme or problem.

All reasonable variations on this program should be approved.

Humanities Minor

This is an interdisciplinary minor offered by the College of Humanities and Fine Arts, and is under the jurisdiction of the dean of that college.

Required: a minimum of 21 hours with at least one course* to be chosen from each of the following areas —

Humanities: 68:022
 English and Modern Languages: 62:034; 68:168; 70:110 or 70:120
 Arts (participatory): 50:072; 50:153; 52:102; 54:xxx (instrument or voice); 60:001; 62:070
 Philosophy and Religion: 64:124; any one of 65:100, 65:101, 65:103, 65:104
 Social Science: 40:118; 98:060; 99:011
 Science: 82:175
 Interdisciplinary Studies: 00:196**; 68:189***

*If any of these courses are taken by the student under another program (e.g., general education, major field, etc.), the student will elect another course in any of the above specified areas or in history.

68:021, Humanities I, is required as a prerequisite to this minor.

**00:196 is to be taken in the senior year. The student will propose a program of readings which will act to tie together the work which has been done in the minor.

***An interdisciplinary course or seminar offered on an experimental basis may be taken in place of 68:189.

Science and Social Science majors may be excused from the requirement in their area, and may substitute a course in any of the other specified areas or in history.

American Studies Major

This is an interdisciplinary program offered jointly by the College of Social and Behavioral Sciences and the College of Humanities and Fine Arts, and is under the jurisdiction of the heads of the departments of History and English Language and Literature and the general supervision of the Committee on American Studies.

The American Studies major consists of a minimum of nine (9) semester hours in each of the following four areas:

- American history
- American literature
- Economics, geography, political science, sociology and anthropology
- Religion, philosophy, theater, art, and music

Required: 96:014; 96:015; 62:052; 94:014; 65:154 or 96:144; plus additional electives from the four areas above for a total of 36 hours
 Required: a senior colloquium* 3 hours
 39 hours

The courses from the four specified areas must be chosen in consultation with an adviser from the Committee on American Studies.

*Colloquium to be an exploration of the total culture of an era or region in historical perspective by applying the disciplines history, literature, art, philosophy, and the social sciences.

Courses used to meet General Education requirements may not be counted on this major.

Note: This major does not carry certification to teach. In order to teach, the student should declare a major on a teaching program and make the major in American Studies a second major.

The programs and general courses in the non-Western foreign area studies are offered under the jurisdiction of the Committee on Asian Studies and the general supervision of the Dean of the College of Social and Behavioral Sciences.

Asian Studies Major — Teaching

Required: 68:124; 68:125 6 hours
 Required: 90:190 3 hours
 Required: 96:182; 96:187 6 hours
 Required: 92:053; 94:011; 99:011 9 hours

Electives in Asian Studies: a minimum of 18 hours of credit from at least four different disciplines must be completed from the following courses (a maximum of 6 hours credit in Hindi or Chinese language courses may be applied toward satisfying the 18-hour elective credit requirement) 18 hours
 Anthropology: 99:136 Anthropology of South Asia
 Art: 60:147 Oriental Art
 Geography: 97:150 Regional Geography
 History:

96:181 Pre-Modern South Asia
 96:183 Pre-Modern Chinese History
 96:184 East Asia to 1850
 96:185 East Asia since 1850
 96:188 South Asian Intellectual History

Language:

Elementary Hindi I and II
 Intermediate Hindi I and II
 Elementary Chinese I and II
 Intermediate Chinese I and II

Political Science:—

94:165 East Asian Politics
 94:168 Politics of South Asia

Religion:

64:130 Religions of India
 64:132 Religions of China and Japan

Supervised Research Project: 68:198 Independent Study (to be supervised by the Asian Studies Committee).

42 hours

Note: The student must also satisfy certification requirements.

Asian Studies Minor

Required: 68:124 and 68:125 6 hours
 Required: one additional course each in China and India (to be chosen from the list of Asian Studies Major electives) 6 hours
 Required: 68:198 (to be supervised by the Asian Studies Committee) combining Asian Studies and the student's major discipline 3 hours
 15 hours

Latin American Studies Major

This major is offered jointly by the College of Social and Behavioral Sciences and the College of Humanities and Fine Arts.

Required Spanish —	
From: 78:051; 78:052; 78:061; 78:062	5-10 hours
78:071 or 78:080	3 hours
Two courses from 78:112, 78:142, 78:144	5-6 hours
Electives in Spanish	0-6 hours
	<hr/> 24 hours
Required Social Science —	
96:176; 96:180	6 hours
At least 15 hours in Latin American courses in two of the following areas: economics, political science, sociology, anthropology, geography	15 hours
	<hr/> 21 hours
Total	<hr/> 45 hours

Students with no language competence will be required to take an additional 5-10 hours of Spanish at the elementary level.

Note: This major does not carry certification to teach. In order to teach, the student should declare a major in one of the social sciences on a teaching program and take the major in Latin American Studies as a second major.

Russian Area Studies Major

This interdisciplinary major is under the direct jurisdiction of the Dean of the College of Humanities and Fine Arts.

Required: a total of 45 semester hours as follows —	
Required Russian — 22 semester hours:	
Courses in intermediate Russian, including 77:011	5-10 hours
Russian Literature (may include 77:102)	5-6 hours
77:141	3 hours
Electives in Russian to complete the 22 hours	<hr/> 22 hours

Required Social Science — 23 hours:
Soviet Union courses including 92:137; 94:164; 96:055; 96:169; 96:170; 97:150;
and 6 hours of electives in European history 23 hours

Hours of history in required Social Science will meet minimal standards to teach in World History.

Note: This major does not carry certification to teach. In order to teach, the student should declare a teaching major in one of the social sciences or in another teaching program and take the major in Russian Area Studies as a second major.

Individual Studies Major

This is an interdisciplinary program administered under the Individual Studies Program by the program director and the Individual Studies Board. (Members of the Individual Studies Board include both faculty and students.) This program requires the completion of 124-130 semester hours, including the General Education requirement of 40 semester hours.

Required: a Coherent, Interdisciplinary Area of Study	30-44 hours
Required: Undergraduate Thesis	6 hours
Required: Elective or other major or minor credit which may include courses required for certification	34-54 hours

Through the Individual Studies Major a student can plan a specific program of courses in an academic area not yet formally developed by any university department as a major. The purpose of this major is twofold: 1) to enable a student to organize his or her own major out of the courses offered in several academic departments; 2) to explore, through individual student programs, interdisciplinary areas of study before those areas are formally adopted as departmental or interdepartmental majors.

Students interested in this major should have at least one semester's experience in university study before applying for such a major. A student will consult first with the Coordinator of Individual Studies concerning a possible application for an Individual Studies Major in a particular area. If the university does not have faculty or curricular resources for the area requested by the student, the student will be so advised. Also, if the student does not yet appear to be academically prepared, or, if his or her plans are not sufficiently clear, specific steps will be recommended by which such preparation and clarification may be gained. Applications for the major and the approval of particular programs will be administered under the Individual Studies Program with the Individual Studies Board serving as the policy-making body.

Upon the application of the student, the Individual Studies Coordinator will ask for the assignment of a faculty adviser by the department head whose discipline is related to the student's individual study area. Once the adviser is appointed, the student and the adviser will develop a list of the courses to comprise the proposed major, and an interdisciplinary faculty committee will be selected to take action on the specific program. In some cases, with the approval of the faculty adviser and the program director, an extraordinary amount of independent study may be counted toward the major. In most cases, an Undergraduate Thesis will be required of this major.

General Studies Major

This major is offered under the jurisdiction of the Individual Studies Board, and is supervised by the director of Individual Studies. The program requires the completion of 124 semester hours, including the General Education requirement of 40 semester hours.

Required: a minimum of 15 semester hours of 100-level courses from each of three of the five principal academic units* of instruction for a minimum total of	45 hours
--	----------

The Individual Studies Board can approve certain completed two-year, vocational-technical programs as fulfilling one of the three college groupings of courses for the General Studies Major. The director of Individual Studies will provide information about those programs already approved and the methods for submitting such programs for new approval.

Only those students who have no other major may declare and be registered for a General Studies Major.

An adviser will be assigned to each student declaring this major when the student requests a specific faculty adviser from the Coordinator of Academic Advising. Such advisers may be faculty members from any of the five principal academic units* of instruction. (*See page 5 for list of academic units.) Advisers are also available in the Individual Studies office.

(See page 40 for *General Studies* program for Registered Nurses.)

Environmental Perceptions Minor

This is an interdisciplinary minor offered under the jurisdiction of the Environmental Perceptions Committee and the general supervision of the Dean of the College of Natural Sciences.

Required: 84:021; 65:170; 68:189 (Environmental Problems) 9 hours
 *Electives: a minimum of 12 semester hours of credit (of which at least six hours must be from 100-level courses) from disciplines other than the major must be completed from courses approved by the Environmental Perceptions Committee 12 hours
 21 hours

*A list of approved courses is available in the office of the Dean of the College of Natural Sciences.

With this minor, students may plan a specific program designed to complement their major. Because the Environmental Perceptions Minor is planned to broaden students awareness of environmental issues as they relate to their major discipline, students interested in this minor should have a clear grasp of the major field before applying for such a minor.

Applications and approval of particular programs will be administered under the College of Natural Sciences, with the interdisciplinary Environmental Perceptions Committee serving as the program coordinating body. Upon application of the student, the Dean of the College of Natural Sciences will appoint a faculty adviser from the Environmental Perceptions Committee who will work closely with the student in the planning of his or her minor. Approval of the minor prospectus is the responsibility of the Environmental Perceptions Committee.

Women's Studies Minor

This interdisciplinary minor is offered under the jurisdiction and general supervision of the Dean of the College of Social and Behavioral Sciences.

Required: 62:128; 68:040; 96:146; 31:057, 40:106, or 40:110 12 hours
 Electives from a selected list of courses chosen in consultation with the Coordinator of the Women's Studies Program for a minimum of 9 hours
 21 hours

These electives may also include individual department's readings, topics, and experimental courses, as well as courses sponsored by the Individual Studies Program that directly relate to Women's Studies. The electives selected must have the written approval of the Coordinator to be filed in the Registrar's Office before the final completion and approval of the minor.

The Graduate Program

The University of Northern Iowa offers a broad curriculum in advanced programs leading to graduate degrees. The eight graduate degrees now offered by the university are:

- Master of Arts
- Master of Arts in Education
- Master of Business Administration
- Master of Music
- Specialist
- Specialist in Education
- Doctor of Education
- Doctor of Industrial Technology

The university continues its endeavors to meet the needs of higher education and advanced preparation in diverse career fields with a strong and growing graduate program. Graduate degree programs were initiated at UNI in 1951 when the university was authorized by the Board of Regents to offer a program of graduate work leading to the Master of Arts in Education; the program began with the summer session of 1952. In 1960 the graduate program was extended with the addition of a sixth-year program leading to the Specialist in Education degree. These programs were developed to prepare professionally competent personnel in education — highly qualified teachers, supervisors, administrators, school psychologists, and specialists in various fields for elementary and secondary schools as well as for colleges. The addition of the Ed.D. program, approved by the State Board of Regents in 1982, enables UNI to offer a complete course of professional preparation for the educational practitioner. Six specializations are available through this degree program: counseling; curriculum and instruction; educational administration; reading; school psychology; and special education.

In recognition of a more general need for advanced study, the university further expanded the graduate program in 1965 with the addition of the Master of Arts degree. This program is open to students who plan to pursue careers in fields other than education and is available, as well, to students interested in doing advanced work in teaching fields — elementary, secondary, and college level. More advanced study in these areas was made possible under the program leading to the Specialist degree inaugurated in 1970.

The addition of the Master of Business Administration degree in 1975 and the Master of Music degree in 1976 demonstrates the university's continued recognition of the changing needs of higher education and the institution's desire to meet those needs. The M.B.A. degree is open to students whose career interests are in the fields of business and is structured in its presentation to those already working in the general community as well as students who have not yet entered their major career field. The Master of Music is a professional degree designed for the student planning a career in college or secondary school teaching, for a performance career as a professional musician or composer, or for further study at the doctoral level.

The Doctor of Industrial Technology, which is the university's first doctoral program, was authorized by the State Board of Regents to begin with the 1978 fall semester. This doctoral program provides advanced-level study in industrial technology for a wide variety of professional fields and includes the study of the technological systems used in industry and their effect on society and culture.

Graduate majors are available in most departments, and graduate-level courses are offered by all departments of the university. A cooperative program leading to the Ph.D. degree in educational administration is also available (see page 184).



Those who wish to continue their professional and cultural growth without fulfilling the requirements for a graduate degree may do so if they satisfy the requirements for admission to graduate study. All students taking work beyond the bachelor's degree, whether they are studying for an advanced degree or not, are classified as graduate students. Detailed information on the university's Graduate Program may be obtained from the Dean of the Graduate College, University of Northern Iowa, Cedar Falls, Iowa 50614.

The University of Northern Iowa is a member of the Council of Graduate Schools in the United States.

The Quad-Cities Graduate Study Center

The University of Northern Iowa is one of eight colleges and universities of Iowa and Illinois which are participating in the Quad-Cities Graduate Study Center, with offices in Rock Island, Illinois. The cooperating institutions offer graduate courses, and appropriate courses completed at the Center may be regarded as residence credit by the institution at which the student is working toward a graduate degree. An interested student should confer in advance with the head of his or her major department. Preliminary inquiries may be directed to the Dean of the Graduate College.

Admission to Graduate Study

(This section applies to all students taking graduate courses at the University of Northern Iowa after receiving the bachelor's degree.)

The admission procedures of the Graduate College are administered separately from those of the university's undergraduate program. Upon receiving an indication of interest in graduate study at UNI by a prospective applicant, the Office of the Registrar will supply appropriate application forms and a description of the scope, policies, and procedures of the university's graduate program.

For purposes of clarity and understanding, the following definitions will apply in the administration of the UNI graduate programs:

Non-Degree Student: A student admitted by the Office of the Dean of the Graduate College for the purpose of pursuing studies unrelated to any graduate degree program.

Non-Degree Status: The status enjoyed by a Non-Degree Student.

Degree Student: A student who has been admitted to a degree program by an academic department.

Degree Status: The status enjoyed by a Degree Student.

Provisional Degree Student: A student who has been admitted, subject to certain reservations, to a graduate degree program by an academic department. The reservations must be overcome before a student may be removed from provisional status, and it is understood that no student may receive a UNI graduate degree while on provisional status.

Provisional Status: The status of a Provisional Degree Student.

Candidate: A student who has been approved for degree candidacy by an academic department and by the Office of the Dean of the Graduate College.

Department: Academic departments of the university offering graduate degree programs and interdisciplinary and interdepartmental bodies offering graduate degree programs.

Application for Admission

A student who expects to earn a graduate degree at this university must file a transcript from the college or university granting the baccalaureate degree if other than the University of Northern Iowa. A student who has earned graduate credit at another college or university must file an official transcript of such credit. A student who does not hold a teaching certificate and expects to be recommended by this university for an original certificate must also file an official transcript. However, students who do not expect to become degree candidates and who do not expect the University of Northern Iowa to recommend them for certificates do not need to file transcripts. An official statement of the degree and date awarded will be sufficient.

Prospective students may apply for graduate admission under one of two categories: *Degree Status*, or *Non-Degree Status*. Each category carries specific regulations.

Non-Degree Status is established to meet the needs of students who (a) wish to take a miscellany of courses which does not comprise a degree program or (b) hope to demonstrate sufficient competence in graduate studies to be considered for admission to a degree program at a later date.

Requirements for admission to Non-Degree Status:

1. A bachelor's degree from an accredited college or university, or
2. Standing within 14 semester hours of graduation, or in the final summer session and within seven (7) hours of graduation, from an accredited undergraduate college or university and enrollment in graduate work concurrently with sufficient undergraduate work to complete a bachelor's degree during the same semester or summer session.
3. A special waiver of the bachelor's degree requirements from the Office of the Dean of the Graduate College.

Responsibility for admitting students into Non-Degree Status and for monitoring their performance lies entirely with the Office of the Dean of the Graduate College.

Students admitted during the senior-year admission provision (see item 2 above) may enroll under the following credit criteria: The combined total of course credits (undergraduate and graduate) may not exceed 15 semester hours in a semester or eight (8) semester hours in a summer session. The graduate work thus completed will be counted as graduate credit only if the student actually earns the bachelor's degree at the end of the given semester or summer session. In registering for such mixed credit, the student must have been accepted for graduate study and must obtain on the reverse side of the registration form written approval for each graduate course from the head of the department in which the course is offered.

Degree Status is accorded students who are deemed qualified by academic departments to pursue a program of studies which can culminate in the earning of a graduate degree. Applicants are to specify in their admissions applications their choice of degree program. If the Office of the Registrar determines that the applicant has an accredited bachelor's degree or is in the process of completing the bachelor's degree during the semester concurrent with the application, it will then refer the application to the department which offers the degree program chosen by the applicant. In so referring the applicant to the department the Office of the Dean of the Graduate College will furnish the department with all relevant supporting materials.

Requirements for admission to Degree Status:

1. Those requirements which apply to Non-Degree status are applicable except that in instances of waiver of the bachelor's degree the academic department concerned must concur with the Office of the Dean of the Graduate College in granting the waiver.
2. Students will be admitted to Degree Status on one of two bases:
 - a. At the discretion of the academic department concerned, an applicant with undergraduate and prior graduate grade point average of less than 3.00 can be admitted as a *Provisional Degree Student*. A Provisional Degree Student who completes eight (8) or more credit hours of a degree program with a 3.00 grade point average, or better, is eligible for reclassification to Degree Student status. The responsibility for such reclassification rests with the academic department concerned.
 - b. an undergraduate grade point average of 3.00 or higher, or its equivalent if a system other than the four point (4.0) is used, and a prior graduate grade point average of 3.00 or higher (if applicable) qualifies a student for admission as a *Degree Student*.
3. Other criteria for Degree Status admission may be established by departments. Students should contact the head of the department for this information.

Non-Degree Students may apply for Degree Status on the same basis as students not previously enrolled in the UNI Graduate College. However, a department may, at its discretion, approve a Non-Degree Student's application for degree status even if the student's undergraduate grade point average is less than 3.00 provided that the student has completed eight (8) or more hours of graduate courses with a grade point average of 3.00 or more.

Responsibility for determining eligibility for admission to graduate degree programs rests primarily with the academic departments. The department admitting a student to its graduate degree program will draft a letter of acceptance to be sent to the student; this letter will describe the requirements necessary for completion of the degree program in question. Any waivers of degree requirements as established by a department must be furnished to the applicant by the department in the letter of acceptance.

Students applying for admission to the UNI Graduate College for degree status will ordinarily be expected to forward, with their application, their scores of the Graduate Record Examination (GRE) Verbal, Quantitative and Analytical Aptitude Tests, and on the Advanced Test which seems most appropriate to the department to which they are applying for degree status. In all cases, the GRE must be taken no later than the first test date following the student's first registration. (If there is doubt on this matter, the department should be consulted before the student takes the examination; some departments may not require their applicants to take an Advanced Test.)

Students applying for admission to a graduate degree program in the School of Business are required to submit their scores of the

Graduate Management Admission Test (GMAT). They need not take the Graduate Record Examination. GMAT scores must be received by the School of Business sixty (60) days prior to registration. Under special circumstances, a department may admit an applicant into degree status without the student's having completed the Graduate Management Admission Test or the Graduate Record Examination, but in no circumstances will a student be approved for the degree candidacy without having taken the Graduate Management Admission Test (if the student is in the M.B.A. program), or (for students in other programs) the Verbal, Quantitative, and Analytical sections of the Graduate Record Examination and, if the department requires it, the Advanced section stipulated by the department in which the student seeks candidacy.

Post-Baccalaureate, Non-Graduate Study

A student who has received a bachelor's degree may choose to apply for further study at the University of Northern Iowa as an undergraduate rather than a graduate student. Undergraduate status will be accorded students who seek:

1. a second baccalaureate degree; or
2. teacher certification; or
3. a miscellany of courses for undergraduate credit.

Students with baccalaureate degrees cannot earn graduate credit while remaining in this undergraduate classification. They must be admitted either to graduate *degree* or *non-degree* status before they can receive graduate credit for their course work (courses numbered 100(g) or 200). The post-baccalaureate student who enrolls at the University should consider carefully whether he or she might want to receive graduate credit for eligible course work. For further information about these admission categories, contact the Graduate College Office or the Registrar's Office.

Application Dates

Applications for *degree-status* admission to all programs, except the Master of Business Administration program, and all credentials required for admission should be on file in the Office of the Registrar at least one month before registration. Applications for admission to the M.B.A. program and all credentials required for admission thereto must be on file in the Office of the Registrar at least two months before registration.

Foreign students should note the special application deadlines required by the Admissions Office.

Applicants for *non-degree* status will be accepted up to five (5) days before registration.

Exceptions

Any departures from the admission procedures outlined above can take place, in the case of a student seeking degree status, only with the permission of the Dean of the Graduate College and of the department in which degree status is sought.

Physical Examinations

Although the University of Northern Iowa no longer requires a physical examination and medical history as part of the admission process, students must have a medical history on file at the Health Center before receiving treatment. If one is not already on file it can be completed at the time the student reports for health care. In the case of some illnesses it may be necessary to have a complete medical history and physical examination to aid in proper diagnosis and

treatment. If required, the examination can be carried out at the Health Center.

Grade Point Average

Note: Students admitted to graduate study and taking their first courses prior to Fall Semester 1978 should refer to the *UNI Catalog (1978-1980)* for grade point requirements.

Graduate students on degree programs are expected to maintain high academic standards. At the end of each term graduate student records are reviewed, and students with unsatisfactory performances are placed on probation or suspended from graduate degree programs.

The following categories are used for review and action by the Dean of the Graduate College.

1. After twelve (12) semester hours:
 - a. Cumulative average less than 2.40 — Suspend from graduate degree programs;
 - b. Cumulative average less than 2.75 — Place on probation.
2. After twenty-four (24) semester hours:
 - a. Cumulative average less than 2.50 — Suspend from graduate degree programs;
 - b. Cumulative average less than 2.90 — Place on probation.
3. If the student completes eight (8) hours while on probation without qualifying as a degree candidate, the student is reviewed for suspension from graduate degree programs.

When a student is suspended, at least one (1) calendar year must elapse before reapplication to a graduate degree program may be made. Such applications must be submitted to the Dean of the Graduate College.

In determining a graduate student's grade index, all coursework attempted at this university within the student's program of study will be used as a basis of computation. If a graduate student repeats a course, both grades will be used in computing the index.

No more than six (6) semester hours of *C* credit (*C+*, *C*, *C-*) earned within the program of study may be applied toward credit for graduation. (Individual departments may identify specific courses within the program of study for which a minimum grade of *B* is required.)

Regulations Affecting Registration

Each student admitted to graduate study is assigned an adviser. The adviser will assist the student in the registration process, involving the selection of courses and such other matters as:

1. **Departmentally Required Examinations.** The Graduate Management Admission Test is required for all students entering the Master of Business Administration degree program. The Graduate Record Examination, Verbal, Quantitative, and Analytical Tests are required of all other students entering graduate degree programs. Students should inquire of their departments which, if any examinations are required in addition to these.
2. **Maximum Academic Load.** The maximum graduate student load during each semester of the academic year is fifteen (15) hours. Persons employed full time should not register for more than six (6) hours of graduate credit in any semester of the academic year.

The normal maximum graduate student load during the eight-week summer session is eight (8) hours; that normally permitted

during each four-week split summer session is four (4) hours; that during the two-week post session, two (2) hours.

Exceptions to these load restrictions may be granted only by the Dean of the Graduate College.

3. **Level of Courses.** Graduate students normally take courses in the 100(g) series and 200 series. A graduate student may take courses in the 100 series (without 'g') or below for *undergraduate credit*, but such courses do not carry graduate credit. However, all courses, graduate or undergraduate, taken as a graduate student, count in determining grade point average.
4. **Credit from Other Institutions.** Graduate credit from other accredited institutions may be accepted to a maximum of one-third of the number of hours (exclusive of thesis credit) required by a particular UNI thesis or non-thesis master's degree program. The specialist and doctoral degree programs each have different transfer credit policies. For a particular degree program's requirements, see its regulations given in this catalog. Students in any graduate degree program should discuss their plans to transfer credits with their program advisors as soon as possible in their degree programs.
5. **Veterans.** The University cooperates with the Veterans Administration in providing for the education of veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action may also receive financial assistance from the Veterans Administration. The Office of Veterans Affairs and the Office of the Registrar will assist students eligible under any of these laws and provide the required reports. Subsistence will depend upon the number of course hours for which the student enrolls. University officials are authorized to make certain exceptions in the matter of veterans doing graduate work. Questions should be referred to the Office of Veterans Affairs.

Waiver of Regulations

Exceptions to Graduate College regulations may be granted by the Dean of the Graduate College. Requests for exceptions will normally be initiated by the student's adviser and approved by the appropriate department head.

These requests and the action subsequently taken will be reviewed periodically with the Graduate Council by the Graduate Dean.

Graduate Assistantships

Graduate assistantships are available to qualified students who are working toward a graduate degree at the University of Northern Iowa. They may only be held by full-time students who are in residence during the time of the assistantship appointment. The associated work assignment is of an academic nature and designed to contribute to the student's graduate education.

A full assistantship carries a stipend plus tuition. (Partial assistantships may also be awarded.) If a student is on a full assistantship for two consecutive academic semesters, a tuition grant is provided for each of those semesters plus the following summer semester. The associated work assignment will not exceed 20 hours per week assisting designated professors in certain appropriate academic functions, including teaching and research.

A graduate student receiving an assistantship stipend must be enrolled full time during that academic session to a maximum of 12 hours per semester or 6 hours during the summer.

Application forms may be obtained from the office of the Dean of the Graduate College or the department in which the student is

applying for an assistantship. Applications should be filed by March 1 with the department.

Recommendations for awarding of assistantships are made by the department head to the dean of the given college who selects the recipients from the college. Appointments are announced by the Dean of the Graduate College.

Scholarships

Information about various sources of financial support for graduate study is available in the Graduate College Office. A student seeking such support should inquire about these sources as far in advance as possible before beginning graduate studies. Most graduate scholarship competitions have application deadlines which occur in early autumn for scholarships to begin the following autumn.

The Graduate College also administers the campus activities involved in several scholarship competitions, such as Fulbright, Rhodes, and Marshall, which support graduate study abroad. Interested students are encouraged to inquire about these programs of support in their junior or senior year of college or as early in their graduate programs as possible.

Some university departments offer scholarships for graduate study. Students should obtain information about these awards from the departments in which they intend to do graduate work.

Loans

Qualified students may secure loans from either the National Direct Student Loan Program or the Iowa Guaranteed Loan Program. Loans are available to students enrolled at least half time (defined in this case as five hours). Information about loans may be secured at the office of the Director of Financial Aids.

Part-Time Employment

The Director of Financial Aids will assist graduate students who need part-time employment. A limited number of opportunities for such work are available on the campus. However, to carry a full load of graduate studies requires so much of the student's time that part-time employment is usually unwise. Individuals who have full-time employment should not register for more than six (6) semester hours of work in any one semester or three (3) semester hours of work in the 8-week summer session.

Financial Aids Office

Information about assistantships and other sources of financial aid, such as scholarships and loans, may be obtained from the UNI Financial Aids Office, 105 Gilchrist Hall, University of Northern Iowa, Cedar Falls, Iowa 50614. See pp. 11-13.

Master's Degree Programs

Common Regulations and Requirements

Admission to Candidacy

Admission to candidacy is not the same as admission to graduate study. A student may wish to take only selected courses, and have no intention of becoming a degree candidate. A student who wishes to earn the master's degree must first be admitted to graduate study and then seek admission to candidacy for the degree.

Admission to candidacy is granted after the conditions explained below have been met. Students must have a cumulative grade point average of at least 3.00 for courses taken as a graduate student to be eligible for candidacy.

Academic departments offering graduate degree programs have established procedures for monitoring and advising students in order to assure that their work meets the standards and complies with the requirements set by the departments. Accordingly, the department conducts a formal interview between the student and a committee or departmental representative assigned by the department to evaluate and guide the progress of the student. No more than twelve (12) semester hours of credit completed before this interview is conducted can be applied toward the degree being sought. Therefore, the interview should be scheduled no later than the second semester of a program in which the student is enrolled on a full-time basis. Moreover, of those courses completed or begun prior to this interview, only those which are subsequently approved by the interviewing committee or departmental representative will be accepted for credit toward the degree program. At this interview the student's *program of study* will be planned and approved. Any alterations in that *program of study* must be approved by this same departmental committee or representative.

The academic departments are not obliged to count toward their degree programs any credit for coursework undertaken without specific advice provided in writing by the department, either through an adviser assigned to the student prior to the formal interview or in the course of the interview itself.

For purposes of evaluating an *application for candidacy* for a graduate degree an academic department may include criteria in addition to a student's grade point average. Computation of the graduate grade point average which is applicable to the evaluation for candidacy is based solely upon those graduate courses which have been approved by the departmental interview committee or departmental representative which has prepared and approved the student program in question.

The student's *application for candidacy* for a graduate degree will be evaluated on the basis of strength of academic performance and soundness of the plan approved for completing the degree program. Accordingly, the application for candidacy should be filed and reviewed shortly after the departmental interview committee or departmental representative has approved the student's study plan.

The forms on which the application is made are available in departmental offices. The completed application is left with the head of the major department. *Unconditional* admission to graduate study is a prerequisite for the approval of candidacy for the master's degree.

The department in which the application for candidacy is filed may recommend the applicant to the Dean of the Graduate College for approval as soon as:

1. The Graduate Record Examination Verbal, Quantitative, and Analytical Tests and any other tests required by the department have

been successfully completed. The Graduate Management Admission Test is required for the Master of Business Administration degree, and scores will have to be submitted prior to being admitted to that program.

2. The departmental candidacy examination has been completed successfully.

This examination is prepared and administered by the department in which the student plans to pursue a major. The examination may be either written or oral, or a combination of the two. Performance tests related to the special skills in such areas as art, music, speech and business education may be included as part of the candidacy examination for students pursuing majors in these areas. Each student should consult with his or her department head concerning the nature and content of these examinations.

The departmental examinations are conducted periodically and the student should consult the head of the department as to the time and place. The student will usually take this examination during the first semester of residence.

3. Either the thesis plan or the non-thesis plan has been designated by the student. On several majors, students selecting the non-thesis option must also complete either Professional Core A or Professional Core B. For most of the majors leading to the master of arts in education degree, the student must hold or be eligible for an Iowa Professional Teaching Certificate. Teaching experience may also be required.
4. A program of studies prepared by the candidate and the adviser has been approved by the departmental committee. This committee, with the student's adviser, has responsibility for the review of the student's programs of studies to ensure balance, breadth, and needed specialization. Each department offering a graduate major has one or more departmental committees.
5. The departmental committee recommends candidacy.
6. The application has been approved by the department head.
7. The application has been approved by the dean of the appropriate college.

The Dean of the Graduate College may approve the application at once or may delay action until additional scholarship or other data are available or may return it to the department with comments. The Dean of the Graduate College is in general charge of each graduate student's program.

Thesis Committee. For the student following the thesis plan, the thesis committee is appointed by the dean of the Graduate College after the dean's approval of the student's application for candidacy. It usually consists of the student's adviser as chairman and two additional graduate faculty members. The committee assists the student in further defining the student's course work, in supervising his or her research and writing, and eventually accepts or rejects the thesis.

The nature of the thesis is described on p. 154.

Selection of Thesis Topic. The student following the thesis plan of study is urged to make at least a tentative selection of a topic by the end of his or her first semester in residence. The delineation of an exact topic is not necessary before applying for candidacy, but the designation of a probable area must be made.

Graduation Requirements

Thesis Plan

1. A minimum of 30 semester hours of graduate credit, of which at least 24 hours must be in course work excluding thesis research credit. At least 20 semester hours must be earned at the University of Northern Iowa.
2. A minimum of nine (9) semester hours in 200-level credits other than xx:299 Research, plus six (6) semester hours in xx:299 Research (for thesis).
3. The course requirements for a specific major and any additional courses designated by the departmental committee.
4. Core Requirements.
 - Master of Arts in Education
 - 20:214 Advanced Educational Psychology — 3 hrs.
 - or
 - 26:234 Philosophy of Education — 3 hrs.
 - Master of Arts
 - Varies with the major. See pp. 155 to 165.
 - Master of Business Administration
 - No core required.
 - Master of Music
 - No core required.

Non-Thesis Plan:

1. The minimum number of hours of graduate credit varies with the major. All include at least 30 semester hours. (See pp. 166 to 171). At least 20 semester hours must be earned at the University of Northern Iowa, of which at least six (6) semester hours must be earned in a single semester or summer session.
2. A minimum of (9) semester hours in 200-level credits, other than xx:299 Research, plus 3 additional semester hours of 200-level credits which may or may not be in xx:299 Research depending upon the policy of the major department and the specific study plan formulated for the individual student.
3. The course requirements for a specific major and any additional courses designated by the departmental committee.
4. Core Requirements:
 - Master of Arts in Education
 - 20:214 Advanced Educational Psychology — 3 hrs.
 - or
 - 26:234 Philosophy of Education — 3 hrs.
 - 25:294 Educational Research — 3 hrs.
 - Master of Arts
 - Professional Core A or Professional Core B — required only by certain majors.
 - Master of Business Administration
 - No core required.
 - Master of Music
 - No core required.
 - Professional Core A (prerequisite: Iowa Professional Certificate or equivalent)
 - 20:214 Advanced Educational Psychology — 3 hrs.
 - or
 - 26:234 Philosophy of Education — 3 hrs.
 - 25:294 Education Research or a departmental course in Research and Bibliography

A course in curriculum or methods of instruction in the major field or any additional course numbered 200 from courses in the 20: through 29: series.

Professional Core B (Students completing Professional Core B with an appropriate distribution of courses in one or more subject areas may be recommended for Iowa Community College certification. Iowa requires a course in American history or American government for all certification.)

27:252 Current Issues in Higher Education — 2 hrs. (or 3 hrs.)

27:250 Teaching in College — 3 hrs.

:297 Practicum — 2 hrs.

5. At least one research paper approved by the department and filed in the departmental office. The research paper must be read and approved by a committee of at least two members of the graduate faculty and be presented in a format acceptable for publication.

Other Requirements and Criteria

1. **Scholarship.** A cumulative grade index of 3.00 ("B" average) must be earned at the University of Northern Iowa in all courses attempted as a graduate student. No more than six (6) semester hours of "C" credit earned within the program of study may be applied toward credit for graduation.
2. **Recency of Credit.** Courses taken more than seven years prior to the granting of the degree cannot be used to meet degree requirements.
3. **Candidacy.** The requirements for candidacy are described on p. 152.
4. **Transfer Credit.** Graduate credit from other approved institutions may be accepted to a maximum of one-third of the total amount of credit included in the student's graduate degree program. However, if use of a correspondence course is authorized, the permissible amount of transfer credit is correspondingly reduced. Graduate credit earned at another institution will not be entered on a student's permanent University of Northern Iowa record until the student's major department approves the credit to be included in the student's program of study. The University of Northern Iowa will not accept as graduate transfer credit courses with a grade lower than "B-."
5. **Correspondence Credit.** Correspondence courses may not ordinarily be applied toward a graduate degree program. In unusual circumstances a student may request that a maximum of 3 semester hours of 100g-level correspondence credit may be applied to a graduate degree program. The request must be made prior to registering for the course.
6. **Workshop Credit.** More than six (6) hours of credit earned in workshop courses ordinarily will not be applied toward a graduate degree.
7. **Radio and Television Class Credit.** Credit earned in radio and television classes usually may not be applied toward the master's degree.
8. **Saturday, Evening, and Short-Term Classes.** Some courses are available in classes scheduled for Saturday morning, or for an evening, or for extended sessions daily for two or three weeks. These classes differ from other residence classes only in that they involve fewer meetings and longer single sessions. Such classes are offered in Cedar Falls and at other announced locations in various parts of the state. Lists of the classes may be secured by writing to the Office of the Registrar during the month preceding the opening of a semester or summer session.
9. **Changes in Course Numbers, Etc.** Occasionally the University makes changes in course designations: title, number, or hours of credit. A graduate student continues to use the designations which exist at the time the student is enrolled in a given course.

- 10. Examinations.** All master's degree candidates on either the thesis or non-thesis plan are required to pass a comprehensive examination over a specific body of knowledge as prepared and administered by each department. Results must be reported to the Office of the Dean of the Graduate College at least 15 days before semester commencement and at least one week before summer session commencement.

Thesis Plan. In addition to whatever examinations are required for each course, the candidate for the degree on the thesis plan will take (1) general graduate examinations, as required (see p. 150), and (2) the departmental candidacy examination (see p. 152). Further, if final written and oral examinations are required by his or her thesis committee and major department, the candidate will be required to pass them.

Non-Thesis Plan. The candidate for the degree on the non-thesis plan is required to take the same examinations required on the thesis plan.

- 11. Research Credit.** Registration for xx:299 Research will not be accepted until the student has submitted a statement or outline of the proposed research project and has secured the approval of the person directing the research project and the head of the appropriate department. A copy of the completed research report, approved by the director of the research project and the department head, will be filed in the departmental office.

Research carries residence credit and may be pursued either on campus or off campus, but **not** in an extension class. There is no prerequisite, although it is strongly recommended that 25:294 Educational Research or a departmental course in research be completed before registering for Research. It is expected that the work will be completed during the given semester for summer session.

- 12. Residence.** At least two-thirds of the minimum hours required for a particular thesis or non-thesis master's degree program must be taken with members of the UNI faculty; this is exclusive of thesis credit. The specialist and doctoral degree programs each have different residence requirements. For a particular degree program's requirements, see its regulations given in this catalog. Students in any degree program should discuss their residence credit plans with their program advisers as soon as possible in their degree departments.

After a student has been admitted as a candidate for the master's degree in the University, and provided that prior arrangements have been made with the dean of the Graduate College, he or she may take work at the University of Iowa, Iowa State University or the Quad Cities Graduate Study Center, for which residence credit may be given at the University of Northern Iowa.

- 13. Thesis.** A thesis is required of all candidates who choose the thesis plan of study. Because the thesis is considered to serve a functional need, no attempt is made to limit the topics considered acceptable. The thesis is to be prepared and submitted in accordance with the *Thesis Preparation and Submission Guidelines* published by the Graduate College Office.

The thesis may take the form of studies, experiments, surveys, compositions, creative work and projects, and may concern itself with such matters as methodology; understanding children, and materials of instruction, or may delve rather deeply into some aspect of a specialized academic field. Whatever the nature of the subject, its development into an acceptable thesis is considered to contribute to the growth of such attributes as maturity of judgment, initiative, writing ability, and organizational ability. While the thesis may make no significant contribu-

tion to the world's knowledge, its preparation should develop in the writer a broader understanding of the world's knowledge and a more genuine appreciation of the research efforts of others.

The work on a master's thesis will normally be considered to cover about 6 semester hours of work. To earn this credit, a student registers for *Research*, and usually not in one block. The instructor will assign a grade for a semester's registration in *Research* based upon the progress made, but may assign a *Research Continued (RC)* if she or he feels the work has not reached the place where it can be evaluated. Registration for the last segment of *Research* credit for which a student registers (for work on his or her thesis) should be postponed until the thesis is near completion. The dean of the Graduate College may authorize the extension of time for the completion of a *Research Continued* in *Research* up to one additional calendar year. If at the end of that time the work has not been completed, the grade of *RC* will be changed to an *F (Failure)*.

All students must formally defend their thesis before a committee composed of at least three graduate faculty. Completion of the thesis project occurs when the thesis has been approved by the committee and the dean of the Graduate College.

- 14. Filing of Thesis.** The thesis must be presented in final form to the thesis committee at least 30 calendar days before graduation. The requirements for the preparation and filing of the thesis are set forth in the *Graduate College Thesis Manual*. Copies of the manual may be obtained through the Graduate College office and should be consulted prior to beginning the thesis. The student must present two acceptable copies, an original and one copy, both on 20 to 24-pound, 100% rag-content, paper. These copies are retained by the university library. Advance approval is needed if other than 20 to 24-pound, certified acid-free, paper will be used. The student's major department may request a third copy for its files.

After the thesis committee has accepted the thesis, the student must submit the two copies to the Office of the Graduate College not later than two weeks before graduation. All theses will be forwarded to the University Library for format approval before being approved by the dean of the Graduate College. When the thesis is submitted to the Office of the Graduate College, the student will present a receipt of payment of the thesis binding cost of \$6 for the library copies. This fee should be paid at the University Business Office. The student will also indicate to the Office of the Graduate College the name and edition of the style manual used in preparing the thesis.

Awards for Literature Searches and Computer Use — The Graduate College offers two forms of financial assistance for students who have chosen the thesis option. Bibliographic Retrieval Awards provide up to \$25 for a single computerized literature search conducted with the assistance of the reference librarians of the UNI library. Research Computing Awards provide students who have elected the thesis option with up to \$100 of computer time through the University's Academic Computing Services. These funds may be used for direct computer charges resulting from use of local computing resources. For further information about these awards, contact the Graduate College Office.

- 15. Filing of Abstracts of Thesis.** An abstract or summary of the thesis is required of all candidates following the thesis plan toward the master's degree. The abstract will be approximately 500 words in length and is submitted with the thesis. Three copies of the abstract must be filed in the Office of the Graduate College; two of the abstracts will be filed with the University.

Library and the third will be retained by the Office of the Graduate College.

- 16. Application for Graduation.** A candidate for the master's degree must make application for graduation not later than the end of the ninth week of the semester or the fourth week of the summer session in which he or she plans to receive the degree. The application form may be secured in the Office of the Registrar. Applications received after the dates designated will be placed with those for the following session.
- 17. Attendance at Commencement.** The candidate for the master's degree is expected to secure the appropriate academic costume and to appear at commencement for the awarding of the degree.

Summary of Hour Requirements

A summary of the hour requirements for both the thesis and the non-thesis plans is listed below. These are the *minimum* number of hours and should not be interpreted as a maximum number. Additional hours may be required by departments for individuals on specific programs or special objectives.

	Thesis	Non- Thesis
Minimum graduate hours required	30*	30-37**
Minimum hours of credit at UNI	20	20-25†
Maximum usable hours combined in transfer and Correspondence Credit	10‡	10-12‡
Maximum usable hours of correspondence credit (requires special permission to use)	3	3
Minimum hours required in courses numbered 200 and above	9#	12##

* Includes 6 semester hours for research.

** Includes at least one research paper. Total hours depends on major chosen.

† Must include 6 or more hours in one semester or summer session.

‡ Up to one-third of the hours on the graduate study plan.

In addition to the 6 hours research credit for thesis.

In some departments they may include 3 hours of xx:299 Research.

Certification and Endorsements

Certification. For approval in some graduate programs, a student must have earned or be eligible for an Iowa Professional Certificate or its equivalent endorsed in an area appropriate to the graduate major. Credit earned in education, psychology, or teaching to secure a teaching certificate as a prerequisite to candidacy for the master's degree may not be used toward the master's degree. Iowa requires a course in American history or American government for all certificates. For information on certification, consult the Registrar.

Teaching Certificate and Endorsements. Students interested in securing certificates to teach in another state should secure information directly from the State Department of Public Instruction in that state and should consult the Registrar of the college.

Students with an Iowa Professional Certificate, the master's degree, and four years of successful teaching experience are entitled to an Iowa Permanent Professional Certificate with appropriate endorsements.

Second Master's Degree

To receive a second master's degree, a student must meet all the requirements for the second degree with the exception that eight hours of work from the first degree may be used for the second degree. The requirements for work at the University of Northern Iowa, "200"

work, and all other specific requirements shall be met for the second degree in addition to work completed for the first degree. For all course work taken beyond the first master's degree, the cumulative grade point index must be 3.00 or higher.

Master of Arts Degree

A number of curricula lead to the degree of Master of Arts. Programs are available for advanced preparation of elementary and secondary teachers, for college teaching, including programs for Iowa Public Junior College certification and for graduate study without reference to teaching. The following majors are offered:

Art
Audiology
Biology
Business Education
Chemistry
Communication and Theatre Arts
Communications Media
Counseling
Earth Science
English
English Linguistics
French
Geography
German
Health Education
History
Home Economics
Industrial Arts
Library Science
Mathematics
Mathematics for Elementary and Middle Schools
Music
Music Education
Physical Education
Physics
Political Science
Psychology
Science
Science Education
Social Science
Sociology
Spanish
Speech-Language Pathology
Teaching English to Speakers of Other Languages (TESOL)
Technology
TESOL/Modern Languages
Translation (Spanish/English)
Two Languages: French/German, Spanish/French, German/Spanish

The Master of Arts program is a highly flexible one. The plan of study prescribed for each student depends upon the student's undergraduate preparation, experience, and future plans. The needs of the student, as determined by the student and his or her adviser and departmental committee, are the guiding factors in course selection. It should be stressed, however, that regardless of the plan of study followed, graduate work leading to the degree of Master of Arts should constitute a cohesive, logically planned program, not merely an

accumulation of credit in a variety of courses. On most programs both the thesis and the non-thesis plans are available. Only selected students are admitted to candidacy.

Requirements for Various Majors

On each curriculum and for each major, the student who plans to receive the master's degree must meet the graduate requirements described on pp. 153-155.

Major in Art

Qualified applicants are admitted by the Graduate Faculty Admission Committee following selective review of all prior academic and creative achievement. Demonstrated equivalencies may be considered. In those instances where undergraduate deficiencies are identified at the time of admission, additional course work will be required; however, credit for such course work may not be applied toward the degree program. Two emphases are offered: *Art Education and Studio*.

Each student, regardless of emphasis, must complete a minimum of thirty (30) semester hours of credit including the following common core:

4 semester hours in 60:280 and

6 semester hours of graduate-level art history

Beyond this required core, individualized programs of study are carefully planned and approved in consultation with a graduate adviser.

Art Education Emphasis:

In addition to the common core, students may elect one of five possible directions: improvement as a teacher; research in art education; submission of an original program proposal; certification as a Curriculum Specialist in Art; or teaching certification for Iowa Community College.

Studio Emphasis:

In addition to the common core, students may elect specialization in any one of the following studio areas: ceramics, drawing, metalwork, photography, painting, printmaking, or sculpture. The degree program is flexible to allow maximum focus upon a specific studio area and/or supportive studio work in several or combined areas.

Three program options are available: thesis, studio-thesis, or non-thesis. Students whose emphasis is Art Education may elect the thesis or non-thesis option. Students whose emphasis is Studio may elect any one of the three options.

The studio thesis, a creative thesis unique to the Department of Art, is highly recommended for those students who wish to consider additional professional study beyond the master's level. It requires the public presentation of a formal exhibition, performance or project including a catalog, together with a formal documentation of that presentation for submission to the Dean of the Graduate College.

Election of the thesis option should be considered only by those students whose studio specialization involves the testing or documentation of highly innovative and technical studio-related procedures.

Guidelines, procedures, and requirements for each emphasis and program option are available from the Head of the Department of Art.

All degree candidates are required to pass a formal Comprehensive Review in partial fulfillment of the Master of Arts degree requirements.

Major in Audiology

The professional program in audiology is designed to prepare students for careers as clinicians providing services to the acoustically impaired, with primary emphasis on children in public schools. Recommendations for clinical certification will be given only upon completion of all academic requirements. Although this major is available in either the thesis or the non-thesis option, a thesis will be permitted only with the department's approval. The non-thesis plan requires four additional semester hours of course work.

Required in audiology: 27 semester hours including the following courses — 51:265; 51:270; 51:271; 51:272; 51:273; 51:274; 51:275; 51:258; 51:289.

Required in a related or tool area: 6 semester hours in courses to be selected by the students as approved by the student's adviser.

To meet academic requirements for the Certificate of Clinical Competence — Audiology, issued by the American Speech-Language-Hearing Association, as well as state licensure laws, a student is required to have 12 semester hours in the area of Basic Communication Processes such as:

- anatomic and physiologic bases of speech and hearing.
- physical bases and processes in the production and perception of speech and hearing.
- linguistic and psycho-linguistic variables related to normal use of speech, language or hearing.

and six (6) semester hours in Speech/Language Pathology. The specific courses to be taken will be chosen in consultation with the student's adviser and may be taken before or concurrently with the major sequence, although they are not part of the major sequence.

A minimum of 300 clock hours of supervised clinical experience is required for the major and may be counted toward the clinical work required for the Certificate of Clinical Competence in Audiology.

Major in Biology

This major is available on both the thesis and non-thesis options. No core is required on either option. Prospective majors must complete an application with the department prior to beginning their programs. Graduate record examination (GRE) scores for aptitude and for advanced biology tests must also be submitted to the department.

Required: 84:292; 82:200.

Required: 84:189g or 84:289 — 2 hrs. (at least one hour must be 289).

Minimum number of hours for the non-thesis option is 37 semester hours, 34 hours plus a three-hour research paper. At least 23 hours must be in the field of biology.

Minimum hours for the thesis option is 30 hours, of which 6 hours is the thesis. At least 12 hours exclusive of research and thesis must be in the Biology area.

Major in Business Education

This major is offered in two emphasis areas: the Business Teaching emphasis and the Administrative Management emphasis. Both the thesis and the non-thesis options are available in either emphasis of the major.

The Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT) must be taken prior to acceptance into the Master of Arts degree major in Business Education. Admis-

sion to candidacy for the program is dependent upon the quality of the applicant's undergraduate record and test scores.

Students must have earned a degree from an AACSB accredited school of business program or are required to complete the following courses, or equivalent courses: 12:030; 12:031; 13:152; 15:020; 15:080 or 18:070; 15:100; 15:153; 15:154; 92:053. Credit earned in these courses may not be applied to the requirements for this major.

The **Business Teaching Emphasis** provides for the needs of business and vocational business teachers who wish to continue their education at a higher level.

Required: 17:207; 17:210; 17:234; 17:240; 17:280; 17:290; 17:299; 18:220; 25:205.

If vocational certification is desired, the following two courses are required: 17:113; 17:212.

The **Administrative Management Emphasis** is designed to qualify students for leadership positions in office occupations. The program is open to students who have a baccalaureate degree in either business or non-business.

Required: 15:260; 15:262; 18:117; 18:119; 18:120; 18:130; 18:220; 18:289; 18:299;

plus a minimum of 8 hours (5 hours of which must be in 200-level courses) from one of the following areas: accounting, marketing, management, or personnel.

Students who have completed any of the 100-level courses at the undergraduate level will select appropriate substitutes in consultation with the major adviser.

Major in Chemistry

This major is available with or without teaching emphasis on either the thesis or non-thesis plan. A minimum of 30 semester hours is required for this major, and the total number of hours will depend upon the student's undergraduate preparation and professional objectives.

Courses in chemistry to be applied to the M.A. teaching program must be beyond the requirements for B.A. Chemistry — Teaching, and courses in chemistry to be applied to the M.A. non-teaching program must be beyond the requirements for the B.A. Chemistry Major A. Individual programs will be worked out in consultation with the departmental graduate adviser.

All programs must include 82:200 or an equivalent course and at least three (3) hours of research, 86:299.

Professional Core B is recommended for two-year college teaching preparation.

All new graduate students should take an orientation examination, administered by the Chemistry Department, during registration or on the first day of classes. Policies on graduate study in chemistry must be obtained from the departmental office.

Attention is also called to the chemistry-physics teaching emphasis program available under the Science Major for the Master of Arts degree. Students may inquire at the Chemistry Department office for information on the program.

Major in Communication and Theatre Arts

A student may seek a general program or specialize in Interpretation, Communication/Public Address, or Theatre. The major is available only on the thesis plan, and requires a minimum of 30 semester hours.

Required: 50:225;
one graduate seminar;
six (6) hours of research/thesis;
plus nine (9) hours of 200-level courses.

At least twenty (20) hours must be taken from departmental courses. Comprehensive examinations are required of all students in this major.

Students taking Professional Core A or B must take 50:230 and 50:283.

Detailed information on the major, including directions for procedures to follow in planning an individualized program and requesting assignment of an adviser, may be obtained from the head of the Department of Communication and Theatre Arts.

Major in Communications Media

This major is offered by the Department of Curriculum and Instruction as a program in media production and message design for persons planning to work in non-school settings, and is available on both the thesis and the non-thesis options. A minimum of 38 hours is required for either option.

Majors in this area will complete a basic core of course work applicable to all preparing for work as media specialists or communications designers. Specific areas of interest will determine the supporting electives. A teacher's certificate is not required. The student's baccalaureate degree may be in any field.

Required: 24:101; 24:130; 24:131; 24:230; 24:240; 24:235; 24:289; 24:297; 24:299.

Electives: 12 credit hours of electives are required from the following courses: 24:105; 24:138; 24:145; 24:147; 24:148; 24:150; 24:151; 24:152; 24:155; 24:156; 24:205; 24:260; 24:285; 24:286.

Major in Counseling

The program is designed for persons who plan to counsel in non-school settings such as churches, industry, student centers, employment services, domestic peace corps, job corps, and similar situations. Students who major in this area will complete a basic core of courses applicable to all preparing for work as counselors. Courses in psychology and measurement are provided as a background. Specific areas of interest and the professional field in which the person plans to work will determine the supporting course work and the appropriate electives. Since persons working on this major will be interested in counseling activities in settings other than that of education, there will be no necessity for the student to hold a teaching certificate. The student's baccalaureate degree may be in liberal arts or a profession, including teaching, however.

This major requires a minimum of 36 semester hours as follows:

Required: 29:103; 29:105; 29:125; 29:124 or 29:220; 29:203; 29:205; 29:226; 29:227; 29:240; 29:252; 29:290 (3 hrs., may be repeated for credit)

Required: a minimum of 5 hours selected with adviser to provide depth in psychological, sociological or work-setting foundations.

Worksheets giving complete details of this program are available in the office of the Department of Educational Administration and Counseling.

Major in Earth Science

Each student who majors in Earth Science will complete Professional Core A or Professional Core B or a special core arranged by the student and his graduate committee.

Required: 87:292 or 25:294; 82:200.

Electives: As approved by the department; a minimum of 18 hours of graduate credit in earth science.

A maximum degree of flexibility is permitted so that each program of studies can be adjusted to the particular needs of the individual. The total number of graduate hours required for the major will depend upon the student's undergraduate preparation. A minimum of 30 graduate credit hours is required for this major.

A research paper in earth science is required of students on the non-thesis program. Credit may be earned for the paper by enrolling for 87:299. It is expected that the paper and research will involve field and laboratory study.

Major in English

The major in English is available on both the thesis and non-thesis options. Students choosing the non-thesis option will also select one of three emphases: (A) Literature emphasis — no professional core; (B) Teaching English in Middle, Junior High, and Secondary School emphasis — Professional Core A; (C) Teaching English in Community Colleges emphasis — Professional Core B.

Before being admitted to degree candidacy, graduate students are required to meet with a department committee for a Candidacy Interview. Students should arrange with the Coordinator of English Graduate Studies to complete this interview during the first semester of their course work. The departmental Candidacy Interview Committee may require a candidate to complete additional course work above the minimum hours specified for the selected option or emphasis. In such cases, these hours will be specified at the time of the interview.

Candidates for this major must achieve a cumulative grade point average of at least 3.00 for all course hours taken in the Department of English Language and Literature.

I. Thesis Option

Students selecting this option are required to take the Advanced Test, "Literature in English," in addition to the Aptitude Tests of the Graduate Record Examinations.

Native speakers of English must demonstrate proficiency in another language by earning at least a "C" grade in a second-semester, college-level course or by passing a specially designed examination. Course work taken to satisfy this foreign language requirement does not count toward the number of hours required for completion of the degree major.

Required: minimum of 30 hours including 9 semester hours of 200-level courses and 6 hours of 62:299 (Research) for the thesis.

Required: 62:201

Electives: planned with adviser and subject to approval of Candidacy Committee — 21 semester hours.

Students selecting the thesis option are required to take the final Comprehensive Examination, Part One (Core Reading List).

II. Non-Thesis Option

A. Literature Emphasis (*no professional core*)

Students selecting this emphasis are required to take the Advanced Test, "Literature in English," in addition to the Aptitude Tests of the Graduate Record Examinations.

Native speakers of English must demonstrate proficiency in another language by earning at least a "C" grade in a second-semester, college-level course or by passing a specially designed examination.

Course work taken to satisfy this foreign language requirement does not count toward the number of hours required for completion of the degree major.

Required: minimum of 30 semester hours including 15 hours of 200-level courses.

Required: 62:201

Electives: planned with adviser and subject to approval of Candidacy Committee — 27 semester hours.

Students selecting this emphasis are required to take the Final Comprehensive Examination, Part One (Core Reading List) and Part Two (selected specialty).

B. Emphasis: Teaching English in Middle, Junior High, and Secondary Schools (*Professional Core A*)

Students selecting this emphasis are required to take either the "Literature in English" or the "Education" Advanced Test in addition to the Aptitude Tests of the Graduate Record Examinations.

Prerequisite for admission to candidacy on this emphasis is the Iowa Professional Certificate or its equivalent. Students admitted to candidacy are expected to have completed the following course work as undergraduates: one course in linguistics; one course in advanced writing; two courses in British literature; one course in American literature; one course in modern or ethnic literature; and 62:190 (Teaching of English). Three (3) semester hours of electives on this master's program may be used to fulfill one of these prerequisites; however, any further deficiencies must be taken in addition to the major's requirements. Students who have not taken all the required prerequisite work should consult at once with the English department's Coordinator of Graduate Studies in order to plan appropriate course work.

A minimum of 32 semester hours, including at least 15 hours of 200-level courses, is required for the Major in English with this emphasis, as follows:

Required: 20:214 or 26:234; 62:201; 62:207 or 62:291.

Required: 62:165; 62:193; 23:130

Required: 63:190; one of the following: 63:192; 63:143; 63:156

Required: 6 hours in 200-level literature courses

Electives: 6 hours*

*Students who have not had 28:138 (Secondary School Teaching) in English are required to take 62:297 (Practicum) — 1 hour.

Recommended electives: a course in journalism, film, speech, or drama; a course in reading or English education; at least one course in literature.

A student who has completed any of the required courses at the undergraduate level may elect other departmental courses to complete the required minimum total of 32 hours.

Students selecting this emphasis are required to take the Final Comprehensive Examination, Part One (Core Reading List) and Part Two (specialty in teaching English in middle, junior high, and secondary schools).

C. Emphasis: Teaching English in Community College (Professional Core B)

Students selecting this emphasis option are required to take either the "Literature in English" or the "Education" Advanced Test in addition to the Aptitude Tests of the Graduate Record Examinations.

Students admitted to candidacy on this emphasis are expected to have completed the following course work as undergraduates: one course in linguistics; one course in advanced writing; two courses in British literature; one course in American literature; and one course in modern or ethnic literature. Any deficiencies must be taken in addition to the major's requirements. Students who have not taken all the required prerequisite work should consult at once with the English department's Coordinator of Graduate Studies in order to plan appropriate course work.

Students completing this program may be recommended for endorsement to teach at the community college or junior college level. *Note:* All certification in Iowa requires a course in either American history or American government, plus a course in Human Relations.

A minimum of 35 semester hours, including at least 15 hours of 200-level courses, is required for the Major in English with this emphasis, as follows:

Required: 27:252; 62:292; 62:297

Required: 20:189 (to be repeated once for total of 2 hours of credit) or 20:214

Required: 23:130; 62:193; 62:201

Required: 63:192; 63:190 or 63:194

Required: 6 hours of 200-level literature courses

Required: one 2- or 3-hour course in journalism, television, radio, or film

Electives: 3 hours

A student who has completed any of the required courses at the undergraduate level may elect other departmental courses to complete the required minimum total of 35 semester hours.

Students selecting this emphasis are required to take the Final Comprehensive Examination, Part One (Core Reading List), and Part Two (specialty in teaching English in community colleges).

Major in English Linguistics

This major is offered on both the thesis and non-thesis options for a minimum total of 30 semester hours on either option.

Before being admitted to degree candidacy, students are required to meet with a departmental committee for a Candidacy Interview. Students should arrange with the Coordinator of TESOL Linguistics to complete this interview during the first semester of their course work. The departmental Candidacy Interview Committee may require a candidate to complete course work in addition to the minimum of 30 semester hours required for a master's degree. In such cases, this work will be specified at the time of the interview.

Required: 63:254; 63:256

Required: 63:280 to be taken each semester offered up to a maximum of 3 semester hours credit

The remainder of the 30 hours shall be selected by the student in consultation with an advisor. Such electives may include appropriate courses from outside the discipline (e.g., foreign language, philosophy, mathematics, anthropology, psychology, speech pathology, or literature).

It is recommended that all students acquire some knowledge of at least one of the following: computer programming, mathematical logic, or set theory. A student who has taken any of the required courses or their equivalents may substitute electives for these hours.

Candidates for this degree must achieve a grade point average of at least 3.00 for all courses taken in the Department of English Language and Literature.

Native speakers of English must demonstrate proficiency in another language by earning at least a "C" grade in a second-semester, college-level course or by passing a specifically designed examination. International students must have achieved a Test for English as a Foreign Language (TOEFL) score of 600, or the equivalent, in order to demonstrate their proficiency in English. An international student may be required to take additional English as a Foreign Language courses at the discretion of the TESOL and Linguistics faculty. Work taken to satisfy the language proficiency requirement does not count toward the 30 semester hours required to complete the program.

Students on the non-thesis option are required to take a comprehensive examination.

Major in French

The major in French is available on both the thesis and non-thesis options; a minimum of 30-32 hours is required for either option. On the non-thesis option, a minimum of 12 hours must be in courses at the 200-level; nine (9) hours of 200-level courses is the required minimum on the thesis option. The non-thesis option also requires a research paper which must be approved by the candidate's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken.

Required: a minimum of 8 hours in literature courses;
a minimum of 8 hours in linguistics, grammar and/or translation courses;
one (1) course in civilization or culture (unless previously met).

The remainder of the program will be determined by the student's needs in consultation with his or her adviser. No more than six (6) semester hours in Written Translation or six (6) hours in Oral Translation may be applied toward this major.

Major in Geography

As required by the Graduate College, the student must complete a minimum of 30 semester hours, of which six (6) hours are for thesis research. Additional hours may be required to make up for deficiencies in the student's background, as determined by the Geography faculty.

Required: thesis, or an equivalent project approved by the Geography faculty

Students must pass a comprehensive examination, both written and oral.

Major in German

The major in German is available on both the thesis and non-thesis options; a minimum of 30-32 semester hours is required for either option. The non-thesis option requires a minimum of 12 semester hours in courses at the 200 level; nine (9) hours of 200-level courses is the required minimum on the thesis option. The non-thesis option also requires a research paper which must be approved by the candidate's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken.

Required: a minimum of 8 hours in literature courses;
a minimum of 8 hours in linguistics, grammar and/or translation courses;
one (1) course in civilization or culture (unless previously met).

The remainder of the program will be determined by the student's needs in consultation with his or her adviser. No more than six (6) hours in Written Translation or six (6) hours in Oral Translation may be applied toward this major.

Major in Health Education

A minimum of 30 semester hours is required in both the thesis and non-thesis options for this major. Additional hours may be required, if, upon entering the graduate program, the student lacks satisfactory prerequisites for required courses. Total hours for the thesis option includes 6 hours of credit for the thesis. Emphases are offered in this major.

Required for all emphases: 41:255; 25:294 or 42:290

Electives as approved by the graduate committee of the Department of Health, Physical Education, and Recreation

Emphasis:

I. Health Promotion/Fitness Management emphasis

Required: 41:290; 41:293

II. Community Health Education emphasis

Required: 41:290; 41:293

III. Cardiac Rehabilitation emphasis

Required: 41:172; 42:253

IV. School Health Education emphasis

Required: 41:148

The additional course requirements for this emphasis will be governed largely by the Iowa Professional Certification requirements.

Major in History

This major is available on either the thesis or non-thesis option with a minimum of 30 semester hours required for each (thesis, 24 hours plus 6 hours credit for the thesis). A research paper is required on the non-thesis option. Prospective majors must consult with the department head about further requirements prior to beginning their programs.

Required: 96:290 or 96:292; 96:193; and
96:289 United States Historiography or 96:289
European Historiography or another approved
historiography course.

Students must take a final comprehensive examination, both written and oral.

A reading proficiency in a foreign language is recommended. This is particularly essential for those persons intending to pursue graduate studies beyond the M.A. degree.

Students must take 3-6 semester hours outside the field of history.

Major in Home Economics

A minimum of 30 semester hours is required in both the thesis and non-thesis options for this major. Up to 20 additional hours may be required if, upon entering the graduate program, the student lacks the equivalent of an undergraduate major in the graduate emphasis. Students wishing to pursue the emphasis in Home Economics Education must qualify for an Iowa Home Economics teaching certificate or fulfill the requirements for such certification in their master's degree program. Total hours for the thesis option includes six (6) semester hours of credit for the thesis. Students electing the non-thesis option are required to write a research paper. Two emphases are offered in this major.

Required for both emphases: 31:281

Electives must be approved by the departmental graduate committee, and may include courses in related disciplines such as chemistry, biology, art, psychology, educational psychology, counseling, social work and/or sociology.

I. Emphasis in Home Economics Education

Required: 31:280; 31:282 or 31:284; 31:283

II. Emphasis in Family Services

Required: 31:252; 31:250 or 31:251; 31:290

At least 15 of the total hours for either program must be in the emphasis area selected. 31:281; 31:282, 31:284, 31:285, 31:286, and 31:289 may be counted toward either emphasis depending upon the content of the course.

Major in Industrial Arts

The industrial arts major is available on both the thesis and non-thesis options. A minimum of 30 semester hours is required for the thesis option, and 32 semester hours for the non-thesis plan.

Required for Professional Core A (*K-14 teachers*): 20:214 or 26:234; 33:214; 33:226; 33:228; 33:270 (6 hours) or thesis; 33:292.

Required for Professional Core B (*post-high school teachers*): 27:250; 27:252; 33:214; 33:226; 33:270 (3 hours) or thesis; 33:292; 33:297.

Required for Departmental Core (*individually planned programming*): 33:292; 33:270 (6 hours) or thesis; and program requirements based on student's needs and interests as cooperatively planned by student and adviser and approved by departmental Graduate Committee.

All students must complete a minimum of 40 semester hours in industrial arts counting both undergraduate and graduate courses. To be admitted as a candidate for the degree in this major, a student must have completed a minimum of 20 semester hours of undergraduate and/or graduate credit in industrial arts.

Candidates selecting the non-thesis option must write a formal research paper (usually initiated in 33:270) approved by the Graduate Adviser and reader.

Major in Library Science

For certification as school media specialist, students must hold or be eligible for the Iowa Professional Certificate or its equivalent.

Required: 35:113; 35:121; 35:210; 35:295.

Additional course requirements for either the thesis or non-thesis plan will be determined by the department. Requirements will be governed largely by certification needs.

Non-thesis plan requires a minimum of 33 semester hours.

Major in Mathematics

This major requires as a prerequisite a bachelor's degree with a major in mathematics or the equivalent. It prescribes no specific graduate courses; upon successful completion of the Candidacy Examination, the individual student programs are chosen with the help of the student's adviser.

A minimum of 30 semester hours is required for both the thesis and non-thesis options.

Students expecting to teach may choose one of the two core programs; however, no core is required for this program.

Major in Mathematics for Elementary and Middle Schools (K-9)

This major is intended for teachers and supervisors. Candidates are expected to hold appropriate certification or to provide for it in the program.

Required advanced education courses: at least 8 hours selected from the following: 20:116; 20:241; 21:141; 21:270; 21:201; 21:289; 25:294; 26:234; 28:250 (maximum of 2 hours).

Required mathematics education courses: 80:191; 80:235; 80:280; 80:281; 80:290; 80:292 or 80:295.

Required mathematics content courses: at least 10 hours selected from: 80:111; 80:112; 80:113; 80:120; 80:144; 80:160; 80:165; 80:172; 80:174; 80:180; 80:189; 80:210; 80:236; 81:102.

Notes:

1. The department may substitute as many as 2 credit hours from 80:133, 80:233, 80:285, 80:286, and 80:297 for courses in the categories of "Mathematics Education" and "Mathematics Content."
2. The department may substitute 6 credit hours from 80:299 for courses listed in the three categories for students on the thesis option. This will normally be accomplished by reducing the required credit hours in each of the above categories by 2 credit hours.
3. A student on this major must have completed 80:134 (or the equivalent) as an undergraduate or else complete this course as a graduate student in addition to the preceding requirements.
4. The specific courses on a student's program will be selected by the student and his or her adviser.

Music

(Students wishing to take courses for graduate credit in the School of Music, or wishing to pursue a degree program in this department, should consult with the Graduate Coordinator for Music Programs prior to registration for any course. Detailed information concerning requirements and procedures will be provided, and specified evidence of previous accomplishments will be reviewed.)

Two major programs of study lead to the Master of Arts degree in music; the major in Music Education which serves the needs of public school teachers who wish to continue their training at a higher level, and the major in Music which involves a course of study comprising a minimum of specialization and a maximum of curricular flexibility.

An applicant for a graduate degree program in the School of Music should possess the baccalaureate degree in music or a demonstrated equivalent. The student should have attained a high degree of proficiency in one or more of the following areas: performance, theory-composition, music education, or music history.

A prospective major must take a written diagnostic examination in the areas of theory and music history, and in the area of claimed competency, if different from the above (e.g., piano, brass or woodwind instruments). This examination normally is taken immediately prior to initial registration as a graduate student. If necessary, a student will take remedial courses to make up any deficiency; such remedial courses will not count toward degree requirements.

In addition to other requirements, the student must pass a comprehensive examination which preferably will take place after completion of course work required for the degree. Students who do not complete a recital or thesis also must pass a written examination prior to the oral examination. For discussion of credit for applied music under the M.A. degree, see page 121.

Students on either major program may elect Professional Education courses from either Professional Core A or Professional Core B to fulfill electives.

Major in Music

This major is offered on both the thesis and non-thesis options for a minimum of 30 hours. Students selecting the non-thesis option will write a research paper.

Required: 52:221; 58:210; 58:211;

Music history and literature (59:xxx) — 6 hrs.;

Applied music (54:1xxg) — 4 hrs.

Electives: Music (all areas except applied music) — 8 hrs.

Other electives as approved by the department — 6 hrs.

Major in Music Education

This major is offered on both the thesis and non-thesis options for a minimum total of 30 hours.

Required: 52:221; 58:210; 58:211;

Music Literature (59:1xx) — 6 hrs.

Required specializations: 57:220; 57:289 (Music Education — 3 hrs.); plus seven (7) hours from one of the following areas:

A. Choral-General Area: 56:110; 56:122; 56:135; 57:130; 57:145; 57:148; 57:165; 57:190; 57:240; 57:250; 57:289 (General Music)

B. Instrumental Area: 56:121; 56:152; 57:138; 57:145; 57:155; 57:170; 57:197; 57:250.

*Electives: 6 semester hours approved by Graduate Coordinator.

*Students whose career plans include research activity or graduate work at the doctoral level in Music Education should pursue a thesis option, in which case the six hours of electives shall be in Research, 52:299.

A maximum of four (4) semester hours of applied music (54:1xxg) may be used as electives on the non-thesis option. The non-thesis option requires the completion of a research paper.

Major in Physical Education

This major is offered in both the thesis and non-thesis options. A minimum of 30 hours is required on the thesis option, and a minimum of 32 hours on the non-thesis plan. The student must have at least 40 semester hours in physical education at the undergraduate and graduate levels, exclusive of activity courses.

Required: 42:290 or 25:205; plus 6 semester hours in the 42:2xx series (excluding 42:299).

Electives as approved by the Graduate Coordinator of the School of Health, Physical Education, and Recreation.

Persons who are or will be employed in a K-12 educational setting will be advised to take 20:214 and/or 26:234 and 25:205.

Candidacy and comprehensive examinations will be required of all students.

Major in Physics

Two emphases are available.

Physics Teaching (Secondary). The program is for high school teachers, and Professional Core A or a departmentally approved core is required. The total number of hours required (minimum of 30) will depend upon the student's undergraduate preparation. Both non-thesis and thesis options are available but non-thesis is recommended unless the student has a large number of undergraduate credits in physics.

Physics Teaching (Community College). Professional Core B or a departmentally approved core is required. However, Professional Core B must be taken by students who do not hold (or who are not eligible to hold) an Iowa Professional Certificate endorsed for Community College Teaching, or its equivalent. A larger number of physics courses (combined undergraduate and graduate) is required than for the other program. The thesis option is normally required. If the student has a strong undergraduate background in physics, the program can be completed with the minimum of 30 graduate hours including thesis.

Both programs require 82:200 unless a suitable undergraduate course is approved as a substitute.

88:120; 88:130, 88:131; 88:157, and 88:158 may not be used for credit in this major.

Attention is also called to the Chemistry-Physics Teaching emphasis program available under the Science Major for the Master of Arts degree. Students may inquire at the Physics Department office for information on this program.

Major in Political Science

This major is available on both the thesis and non-thesis options. For the thesis plan, a minimum of 24 semester hours plus 6 hours for the thesis is required. A student on the non-thesis plan must complete a minimum of 33 graduate hours.

Required: 94:292 and 94:275.

A student may, with departmental approval, take as much as 12 hours in other disciplines. Each student's program will be determined by individual needs and in consultation with the student's adviser and graduate committee.

All students must take a final comprehensive examination, both written and oral.

General Psychology Major

This program is designed to: (1) provide strong basic training in experimental design, scientific methodology, and the analysis and interpretation of data; (2) familiarize students with research and theory in several major areas of psychology; (3) provide direct experience in evaluating, planning, conducting, and reporting research projects; and (4) prepare students for either doctoral-level studies in experimental or clinical psychology or for provision of psychological services under appropriate supervision in applied settings. In addition to meeting general university admission requirements, applicants must submit to the department Graduate Record Examination scores for aptitude and advanced psychology tests, and three letters of recommendation. Students must also complete a departmental application form.

Note: All core courses assume at least one undergraduate course in the same areas as a prerequisite:

Required core: 40:239; 40:240; 40:250; 40:260.

Also required: 40:297 (1 hr.); 40:299 (2 hrs.); thesis (6 hrs.); demonstrated competence in the following areas: developmental, social, biological, and psychopathology (proficiency in these areas is to be demonstrated by successful completion of comprehensive written examination). A minimum of 39 semester hours, including thesis, is required for the M.A. degree.

Students may elect a career option of general-experimental or experimental-clinical psychology in consultation with their academic advisers.

Major in Science

A minimum of 32 hours is required for this major. The student's total number of graduate hours will depend upon his undergraduate preparation. This major requires either a thesis or a research paper.

A student must complete 82:200 or an acceptable substitute.

Detailed information on this major, including directions for procedures to follow in planning an individualized program and in requesting assignment of an adviser, may be obtained from the Dean of the College of Natural Sciences, UNI, or the Dean of the Graduate College.

A chemistry-physics teaching program is available with this major. Detailed information may be secured in the Chemistry Department office or the Physics Department office.

Major in Science Education

Major offered on both the thesis and non-thesis option. Program requires a minimum of 32 semester hours.

Required: 82:280; 82:200 (or acceptable substitute); 28:250 or 8x:297; 25:205 or 84:292 or 86:292 or 87:292 or 88:292.

Required: At least 12 hours in one and no less than 6* hours in a second of the following disciplines: biology, chemistry, earth science, and physics (*or in closely related courses in disciplines different from the 12-hour emphasis).

Required: Minimum of 6 hours as optioned —

Thesis option — thesis in science education or a laboratory science;

Non-thesis option — electives as approved by the student's advisory committee.

Inquiries for additional information concerning this major, including assignment of an adviser and advisory committee, should be made to the chairman of the Science Education Faculty or the Dean of the College of Natural Sciences.

Major in Social Science

This major is available only to students taking Professional Core A or B. A student must select two areas of study, one of which should be his or her emphasis, from the following departments:

Economics
Geography
History
Political Science
Psychology
Sociology and Anthropology

Inquiries for additional information on this major should be directed to the graduate coordinator of social science, College of Social and Behavioral Sciences or to the Dean of the Graduate College.

Major in Sociology

The major in sociology is available only on the thesis option. A minimum of 30 hours, including six (6) hours of research credit is required.

Required: 98:200 and 98:201.

Electives: at least 12 hours in sociology with three of these elective hours at the 200 level.

Candidates for the degree may take six hours outside sociology. These electives must be approved by the Department of Sociology.

A reading knowledge of a foreign language is recommended.

Also required: Comprehensive examinations. Written and/or oral, at the discretion of the department.

Students entering graduate study in this department should have taken the following courses or should be able to demonstrate competence in them: 98:058, 98:060, 98:080, 98:085, and 98:170.

Major in Spanish

The major in Spanish is available on both the thesis and non-thesis options; a minimum of 30-32 semester hours is required for either option. Half of the course work taken (12 hours for the thesis option, 15 hours for the non-thesis option) must be at the 200 level. In the case of the non-thesis option, a research paper must be approved by the candidate's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken.

Required: a minimum of 8 hours in literature courses;
a minimum of 8 hours in linguistics, grammar and/or translation courses;
one (1) course in civilization or culture (unless previously met).

The remainder of the program will be determined by the student's needs in consultation with his or her adviser. No more than six (6) hours in Written Translation or six (6) hours in Oral Translation may be applied toward this major.

Major in Speech-Language Pathology

This major is available under two Plans (A and B), both of which have the following requirements in common. These requirements include both graduate and undergraduate courses considered essential to certification and the master's degree. Starred (*) courses will normally have been completed at the undergraduate level and must precede additional work in speech pathology.

Required in speech pathology: *51:010; *51:105; *51:106; *51:111; *51:125; *51:127; *51:135; *51:150; *51:155; *51:156; *51:157; *51:165; *51:195; *51:196; 51:130; 51:230; 51:240; 51:241; 51:246; 51:255; 51:275; 51:290; 51:258; 51:249; 51:289 (Seminar in Articulation Disorders); 51:291; 51:299 (1-3 hrs. credit for non-thesis option; 6 hours credit for thesis option)

Required in physics: *88:008.

Required in educational psychology: *25:180.

The student, in consultation with his or her adviser, must choose courses designed to meet the American Speech-Language-Hearing Association academic requirements for Certificate of Clinical Competence. Recommendation for clinical certification will be given only upon completion of all academic requirements.

In addition to the above courses, the student must complete 300 hours in supervised clinical practicum, with 150 of these hours at the graduate level.

The major may be completed with either a thesis or non-thesis option, but a thesis will be permitted only with the approval of the department.

Plan A. This plan is a minimum five-year program and is based on an undergraduate teaching major. The non-thesis option will require 40 semester hours, the thesis option 37 semester hours.

The professional program in speech-language pathology is a program for both undergraduate and graduate courses leading to a Master of Arts degree. Recommendation for certification in speech-language pathology is made only upon completion of the combined undergraduate-graduate program. This program is designed primarily to prepare students for careers as clinicians providing remedial services to the speech and hearing handicapped, with emphasis on children in public schools.

A student on this program must complete all the requirements for the B.A. degree, Speech-Language Pathology Major — Teaching, and must meet all the requirements for admission to graduate work at UNI, and complete all other requirements for the master's degree.

The completion of the undergraduate major or its equivalent will be considered adequate undergraduate preparation for the graduate portion of the program. Deficiencies in undergraduate preparation must be made up before the student can begin his graduate sequence in speech-language pathology.

Plan B. This program is for students who do not desire formal teaching certification but who will be eligible for the Iowa Statement of Professional Recognition in speech pathology. If the student has no previous school experience and no teaching certification, the student will take 51:195 and 28:250. If the student's undergraduate major was other than speech-language pathology, he or she will complete the same work as the other students plus any deficiencies in background work.

Major in Teaching English to Speakers of Other Languages (TESOL)

All students who have not had the following courses, or the equivalent, must include these courses as part of their graduate major: 63:130; 63:156; 63:154; 63:192; 63:194. Students selecting the non-thesis option are strongly recommended to take six (6) hours of education and/or psychology, chosen to meet their individual needs.

Before being admitted to graduate degree candidacy, students are required to meet with a department committee for a Candidacy Interview. Students should arrange with the Coordinator of TESOL and Linguistics to complete this interview during the first semester of their course work. The departmental Candidacy Interview Committee may require a candidate to complete course work in addition to the minimum of 30 semester hours required for a master's degree. In such cases, these hours will be specified at the time of the interview.

Required: 63:292; 63:295; 63:297

Required: 63:280 to be taken each semester offered up to a maximum of three (3) semester hours credit.

Candidates for this degree program must achieve a cumulative grade point average of at least 3.00 for all courses taken in the Department of English Language and Literature.

Native speakers of English must demonstrate proficiency in another language by earning at least a C grade in a second-semester, college-level course or by passing a specifically designed examination. International students must have achieved a TOEFL score of 600, or the equivalent, in order to demonstrate their proficiency in English. An international student may be required to take additional English as a Foreign Language courses at the discretion of the TESOL and Linguistics faculty. Work taken to satisfy the language proficiency requirements does not count toward the 30 semester hours required to complete the major program.

Students on the non-thesis option are required to complete a comprehensive examination.

Students who wish certification to teach should request information concerning certification requirements from the College of Education, University of Northern Iowa, or from the Department of Public Instruction in the state in which they plan to teach.

Major in Technology

This major requires a minimum of 33 semester hours and is available on both the thesis and non-thesis options in three specific emphases.

The candidate must:

- 1) possess a baccalaureate degree in technology, industrial arts, mathematics, physics, engineering, or some related field;
- 2) have earned a minimum of 8 semester hours of college mathematics and 8 semester hours of college physics and/or chemistry or other science related to the major area (this may be either graduate or undergraduate credit);
- 3) have earned a minimum of 15 semester hours in a major technical field and 8 semester hours in supporting technical subjects;
- 4) have or acquire one year of recent and significant trade or technical experience in industry in his particular field of emphasis.

The successful completion of a written Departmental (Department of Industrial Technology) Candidacy Examination is required in all three emphases, and students on non-thesis programs must successfully complete a written final comprehensive examination. In addition to the above, the emphases in Vocational-Technical Teaching and in Vocational-Technical Education Supervision and Administration must have credit in the following courses (or their equivalents): 33:101; 33:181; 33:191; and 33:193. These courses do not apply for credit on the major.

Emphasis in Vocation-Technical Teaching

Required: 27:250; 33:214; 33:270 (6 hrs.); 33:292; 33:297; 81:102.

Electives as approved by the department from a selected list.

Emphasis in Vocational-Technical Education Supervision and Administration

Required: 15:101 or 15:105; 15:165 or 15:184; 15:262; 20:214; 27:252; 33:226; 33:270; 33:292; 81:102.

Electives as approved by the department from a selected list.

Emphasis in Industrial Supervision and Management

Required: 81:102; 15:181; 15:262; 33:187; 33:270; 33:292; 33:299.

Required: 92:139 or 92:141 or 92:160 or 92:135.

Electives as approved by the department from a selected list.

Major in TESOL/Modern Languages

The major is normally available on only the non-thesis basis. A minimum of 31 semester hours is required. The student who has not completed 7x:101 and either 63:130 or 63:125 (or the equivalent) before entering the master's degree program must add these courses to the requirements stated below. There is no separate modern language requirement.

Required: 63:192; 63:194; 63:292; 63:297; at least one semester of 63:280; 63:256 or 63:285 or 63:295; for a total of 16 hours.

Required: One of the following language emphasis for a minimum total emphasis of 15 hours of which six (6) hours must be at the 200-level.

French: 72:124 or 72:125; 72:180, 72:203 or 72:207; 70:190; plus course(s) approved by the graduate French adviser.

German: 74:123; 74:180; 74:203; 70:190; plus course(s) approved by the graduate German adviser.

Spanish: 78:123 or 78:140 or 78:152; 78:107 or 78:180 or 78:185 or 78:195; 78:203 or 78:205; 70:190; plus course(s) approved by the graduate Spanish adviser.

Note: International students must have achieved a TOEFL score of 600 or the equivalent in order to demonstrate their proficiency in English. An international student may be required to take additional English by attending 63:105 or 63:106 at the discretion of the TESOL and Linguistics faculty. Neither 63:105 nor 63:106 may be counted for credit on the TESOL and Modern language program.

This major does not make one eligible for certification to teach.

This major is offered cooperatively by the Department of English Language and Literature and the Department of Modern Languages, and is under the jurisdiction and supervision of the heads of these two departments.

Major in Translation (Spanish/English)

Primarily an M.A. program dealing with the manipulation of linguistic skills, this major is offered on the non-thesis option. This program is not appropriate for students planning to pursue traditional doctoral studies.

There are two versions of this program; one for native English speakers and another for native Spanish speakers. Those whose native language is neither Spanish nor English will determine, in consultation with an adviser, which track is appropriate.

Prerequisites: (If the student has not already had these courses, or their equivalents, they must be added to the program requirements for the appropriate group):

For native English speakers: 78:101; 1 upper-level Hispanic literature course.

For native Spanish speakers: TOEFL 550 or equivalent; 62:104 or 62:105; 1 upper-level English literature course.

Required: A minimum of 45 credit hours, at least 20 of which must be at the 200 level, as detailed below. (The amount of 45 credit hours may be reduced by as many as 7 credits if evidence is presented to substantiate that these courses, or their equivalents, have been successfully completed at the undergraduate level.)

The remainder of the program is to be distributed as follows:

For native English speakers: 70:181; 78:201; 78:220; 78:225; 63:130.

For native Spanish speakers: 70:181; 62:234 or 62:260; 78:220; 78:225; 63:130.

This program involves three distinct cultures: Spain, Spanish America and the United States. At least two courses (at least one in each of the two non-native cultures) from the following:

For native English speakers: 78:123; 78:140; 78:152.

For native Spanish speakers: 78:123; 78:140; 78:152; 96:116; 96:124; 96:147.

At least two courses from the following:

For native English speakers: 70:180; 70:230; 78:107*; 78:185*.

For native Spanish speakers: 70:180; 70:230; 78:107*; 78:185*.

*May be taken only once for credit. 78:107 may not be taken for credit after 78:220; 78:185 may not be taken for credit after 78:225.

At least 17 credit hours from among the following:

For native English speakers: 63:192; 78:161; 78:180; 78:195; 78:205; 78:282; 78:299.

For native Spanish speakers: 63:154; 63:156; 63:192; 63:254 or 63:256; 78:195; 78:282; 78:299.

Comprehensive Examinations:

A research paper relevant to the content of the program must be approved by the candidate's M.A. committee and filed in the departmental office before comprehensive examinations may be taken.

The comprehensive examination committee will consist of three faculty members, at least two of whom must be in the Spanish section.

The comprehensive examination will consist of two parts, written and oral.

Major in Two Languages: French/German, Spanish/French, German/Spanish

The two-language major in Modern Languages is available on both the non-thesis and thesis options, as follows:

Non-Thesis: A minimum of 32 semester hours of course work with a minimum of 16 hours in each of the target languages is required. Of these, at least eight (8) semester hours in each language must be at the 200 level.

Thesis: In addition to six (6) semester hours of credit for the thesis, a minimum of 26 semester hours of course work with a minimum of 13 hours in each of the target languages is required. Of these at least seven (7) semester hours in each language must be at the 200 level.

Required: (for both options) in each language:
a 200-level course in literature
a 200-level course in linguistics
a course in culture and civilization

The student's program will be planned in consultation with his or her adviser.



Master of Arts in Education Degree

This degree is designed for students whose work is primarily in professional education. Majors are available in the following areas:

Early Childhood Education *Early Childhood Education*

Educational Media *Educational Media*

Educational Psychology *General Educational Psychology* *School Psychology* *Teaching*

Education of the Gifted *Education of the Gifted*

Elementary Education *Elementary Education*

Middle School/Junior High School Education *Middle School/Junior High School Education*

Reading *Elementary Reading and Language Arts* *Secondary Reading* *Remedial Reading*

School Administration and Supervision *Secondary Principalship* *Elementary Principalship* *Elementary Supervision*

School Business Management *School Business Management*

Special Education *Special Education*

Student Personnel Services *Elementary Guidance and Counseling* *Secondary Guidance and Counseling* *College Student Personnel Services*

Although a special curriculum is not available for supervisors of student teaching, a student can arrange a program to qualify for such a position.

Two plans of study leading to the degree of Master of Arts in Education are available: one plan requires the writing of a thesis; the other does not. The program described for each student depends upon the student's undergraduate preparation, experience, and future plans. The needs of the student as determined by the student, and his or her adviser and departmental committee, are the guiding factors in program planning. Regardless of the plan of study followed, graduate work leading to the degree of Master of Arts in Education should constitute a cohesive, logically planned program, not merely an accumulation of credit in a variety of courses. Only selected students are admitted to candidacy.

Detailed information for each of the above programs, and specific requirements for each major, may be obtained from the head of the department offering the major. These include:

Department of Curriculum and Instruction
Early Childhood Education
Educational Media
Education of the Gifted

Elementary Education
Middle School/Junior High School Education
Reading

Department of Educational Psychology and Foundations
Educational Psychology

Department of School Administration and Personnel Services
School Administration and Supervision
School Business Management
Student Personnel Services

Department of Special Education
Special Education

Requirements for Various Majors

On each curriculum and for each major, the student who plans to receive the degree of Master of Arts in Education must meet the graduate requirements described on pp. 153-155.

Many programs at this level carry with them the requirements for certificate endorsement. In some cases, the student may be building up competency in a field in which he or she has had little or no preparation at the bachelor's level. For these reasons some of the programs must carry with them a substantial number of specific requirements. Whenever possible, however, an effort is made to keep the specific course requirements for each major at a minimum so that the student, with the help of his or her adviser and the departmental committee, may plan the graduate program which will best meet the student's individual needs.

Worksheets showing the specific requirements of each major and emphasis are available in the office of the department which offers the major.

Early Childhood Education

Major in Early Childhood Education

This major is structured to increase the student's competence in working in educational programs for children from birth through 7 years of age, and is designed to prepare teachers, directors, consultants, and supervisors for various educational programs such as day care centers, public and private nursery/pre-school, and kindergartens. The student must hold Endorsement 10 or 53 prior to the completion of this major. In addition to the Professional Core, the major requires the following:

Required: 21:155; 21:201; 21:214; 21:221; 21:289 (Early Childhood); 31:252

Electives to complete the minimum total of 30 semester hours will be selected with the approval of the adviser and departmental Graduate Board.

Educational Media

Major in Educational Media

This major is designed to prepare educational media specialists for a variety of professional positions in educational settings, including: school building level, school district level, vocational-technical school, community college, and university. The student must hold certification valid for either elementary or secondary school teaching to meet requirements in Iowa for endorsement as an Educational Media Specialist.

The major is available on both the thesis and non-thesis options for a minimum total of 38 semester hours on either option.

Required: 24:101; 24:131; 24:230; 24:235; 24:240; 24:289; 27:297; 24:299; 20:214 or 26:234; 25:294.

Electives: 9 credit hours of electives are required from the following: 24:105; 24:130; 24:138; 24:145; 24:147; 24:148; 24:150; 24:151; 24:152; 24:155; 24:157; 24:205; 24:260; 24:285; 24:286.

Educational Psychology

Major in General Educational Psychology

This major is planned as follows: to prepare community college personnel to teach preprofessional teacher-education courses; for persons who want to pursue a terminal degree in educational psychology; and for those who are working in community, governmental, and human service occupations. A student who expects to teach in college should take: 27:250 and 27:252.

Required educational psychology core: minimum of 9 hours from the following: 20:100 or 20:116; 20:109; 20:139; 20:140; 20:142; 25:181.

Required: completion of 9 hours in one of two emphases*.

Electives: a minimum of 9 hours selected with approval of adviser.

*Emphases:

Development and Learning: 20:210; 20:230; 20:235; 20:289 (Education and Psychology) or 20:290 (Education and Psychology).

Evaluation: 20:193; 25:180; 25:270; 25:289 (Evaluation and Research) or 20:290 (Education and Psychology).

Major in School Psychology

For a recommendation for certification as a school psychologist (Endorsement 40), the student must complete the master's degree and have accumulated a minimum of 60 semester hours of graduate work as approved by the Department of Educational Psychology and Foundations.

Competency is required through examination or through the following courses: 25:181; 25:180.

Required: 20:230 or 20:142; 25:282; 25:283; 20:194; 22:150; 20:289; 20:290; 29:205; 23:112 or an acceptable course in reading.

Some of these courses required may be satisfied by previous undergraduate work.

Electives as recommended by the department.

Major in Teaching

This major is designed to serve the professional needs of experienced teachers.

Required: A minimum of 30 semester hours as follows:

Component I:	Advanced Professional course work	8-12 hours
Component II:	Theoretical-Philosophical course work	8-12 hours
Component III:	Advanced Academic course work in one department	8-12 hours

Education of the Gifted

Major in Education of the Gifted

The student must be fully certified to teach in the elementary or secondary schools upon completion of this program.

The Professional Core, 25:205 and 20:214 or 26:234 or the equivalent, plus two years of teaching experience and permission of the head of the Department of Curriculum and Instruction are prerequisite for entering the program core.

Required program core: 21:254; 21:255; 21:299; 25:282.

Electives from a suggested list: these electives must be selected in consultation with the student's graduate adviser.

Elementary Education

Major in Elementary Education

The student must be fully certified to teach in the elementary school prior to the completion of the major. In addition to the common Professional Core, the student must complete an elementary education core and the requirements for one of the following four emphases within the major: *General Curriculum*, *Mathematics*, *Science* and *Social Studies*.

The program is designed to strengthen the student as an elementary teacher in the major areas of the curriculum or to permit the student to specialize in one content area in order to function as a team leader or as a stronger teacher in a departmentalized system.

Required elementary core: 21:201; 21:289.

Required emphasis (select one):

General Curriculum: 21:243; 21:242; one course from 21:141 or 80:280; and an advanced course in Elementary Reading.

Mathematics: 21:141; a minimum of 5 hours from 80:292, 80:295, 80:235, 80:280, 80:281.

Science: 21:212; 21:242; 82:130; and 2 to 4 hours in advanced course in science to fulfill individual needs.

Social Studies: 21:213; 21:243; and 4 to 8 hours in advanced Social Studies courses.

Electives to complete the program as approved by the student's adviser and the departmental Graduate Board.

Middle School/Junior High Education

Major in Middle School/Junior High School Education

This major is offered on either the thesis or non-thesis option, and requires completion of a minimum of 30 semester hours (additional hours may be required, depending upon the student's background and needs). Certification to teach the young adolescent is required before entering the major. The program is designed to aid the classroom teacher to become more effective in teaching the young adolescent child by strengthening the individual's professional competencies in instructional areas and through greater familiarity with the unique nature of young adolescents and the emerging programs in this area. Professional Core A is required for this major.

Required for a minimum of 11 hours: 21:270; 20:116 or 20:235; 20:141 or 26:126; 21:289 (2 hours); and 2 hours in an advanced course in Reading (23:xxx) preferably 200 level.

Required emphasis: minimum of 9 hours in cognate area of study in a subject area field or academic discipline.

Electives to complete the program: selected by the student in consultation with adviser and approved by the departmental Graduate Board.

Reading and Language Arts

Major in Elementary Reading and Language Arts

The student must be fully certified to teach as an elementary teacher prior to completing this major. Competency is required through examination or the following courses: 20:100; 23:044; 23:110; 23:111; 23:112; 23:113; 23:140.

Required: 23:144; 23:210 or 23:290.

Required: two seminar courses —
23:289 Seminar in Reading and Language Arts — 2 hrs.
23:289 Seminar in Reading — 2 hrs.

Required: 3-6 hours from the following supporting areas: linguistics, library science, art, music, physical education, English, speech pathology, speech.

Major in Secondary Reading

The student must be certified as a secondary teacher prior to completing this major. The program is designed to prepare teachers in the areas of corrective and developmental reading in the junior and senior high school. Required, if not completed on the undergraduate level: 20:116; 23:130; 23:132; 23:147; 23:192; 25:180; 25:181; 62:165.

Required: 23:210; 23:212; 23:289; 23:290

Electives: 23:114; 23:140; 23:238

Students who complete this program may qualify for certificate approval as a reading teacher by completing:

- a) a course in linguistics,
- b) a course in speech.

Graduates of this program will qualify for certificate endorsement (K-12) as a reading clinician (Endorsement No. 38) by completing:

- 1) two years of teaching experience,
- 2) a course in elementary reading methods,
- 3) 23:238 and 23:240.

Completion of the following requirements will qualify a graduate of this program for certificate endorsement (K-12) as a Reading Specialist (Endorsement No. 54):

- 1) four years of teaching experience, including one year as a reading teacher,
- 2) a course in elementary reading methods,
- 3) a course in psychology of human development,
- 4) a course in children's literature,
- 5) 23:238; 23:289 (Administration and Supervision of Reading Programs); 23:290 (Supervision).

Major in Remedial Reading

Students who complete this program must be certified to teach in either the elementary or secondary school. This program is designed to prepare teachers to provide diagnostic and instructional services as a reading clinician for children with severe reading disabilities.

Required, if not completed on the undergraduate level: a course in the psychology of human development; a course in elementary or secondary reading methods; a course in children's or adolescent literature; 23:140; 23:147; 23:192; 25:180; 25:181.

Required: 23:210; 23:212; 23:238; 23:240; 23:289; 23:290

Electives: 23:111; 23:112; 23:113; 23:114; 23:132; 23:242.

Students who complete this program and have at least two years of teaching experience will qualify for Certificate Endorsement (K-12) as a Reading Clinician (No. 38).

Students who complete this program and also meet the following requirements will qualify for certificate endorsement (K-12) as a Reading Clinician (No. 54).

- 1) four years of teaching, including at least one year as a reading teacher;
- 2) course work in both elementary and secondary reading methods;
- 3) course work in the psychological development of both children and adolescents;
- 4) 23:132; 23:289 (Administration and Supervision of Reading Programs); 23:290 (Supervision of Reading Programs).

School Administration and Supervision

Major in Elementary Principalship

The student must complete the usual degree and certification requirements as well as those for the particular endorsement to be requested, and must complete a minimum of one year of successful teaching appropriate to the major prior to graduation.

In addition to the general requirements, a student will be required to complete:

27:201; 27:204; 27:212; 27:220; 27:221; 27:230.

Practicum in an appropriate area.

A course in child growth and development, guidance and counseling, educational psychology, or in the area of the exceptional child.

Course electives.

Major in Secondary Principalship

The student must complete the usual degree certification as well as those for the particular endorsement to be requested; and must complete a minimum of one year of successful teaching appropriate to the major prior to graduation.

In addition to the general requirements, a student will be required to complete:

27:201; 27:204; 27:226; 27:227; 27:228; 27:230.

Practicum in an appropriate area.

A course in child growth and development, guidance and counseling, educational psychology, or in the area of the exceptional child.

Course electives.

Major in Elementary Supervision

The student must complete the usual degree and certification requirements as well as those for the particular endorsement to be requested; and must complete a minimum of one year of successful teaching appropriate to the major prior to graduation.

In addition to the general requirements, a student will be required to complete:

27:201; 27:212; 27:221; 27:141; 27:220; 27:210 or 27:204; 27:230.

Practicum in an appropriate area.

Other courses in Elementary Education.

Course electives.

Note: Superintendency

The program for the preparation of the superintendent of schools is a two-year program. The requirements may be met by completing the appropriate Specialist in Education degree program or prescribed program beyond the master's degree. A program sheet with specific details may be obtained from the departmental office.

School Business Management

Major in School Business Management

This major is offered by the Department of Educational Administration and Counseling under both the thesis and non-thesis options. A minimum of 30 semester hours is required for this program as follows:

Required: 27:201; 27:230; 27:240; 27:243.
Electives as approved by chairman.

Special Education

The student must be fully certified to teach in either the early childhood, elementary, or secondary school (depending on the major chosen) prior to completing a major in this area.

Competency is required through examination or the following courses: 20:100 or 20:116 (whichever appropriate), and 22:150.

Major in Special Education

Required: Professional Core A

Required: Competence through examination or course work at either the graduate or undergraduate level in 22:170, 22:171, 22:174, and 6 semester hours of 22:192 from tutorial, profound, pre-academic preschool, primary, intermediate, or secondary.

Required: Competence demonstrated through proficiency evaluation or course work at the graduate level in 22:184, 22:252 and 22:290 which must be taken concurrently. (For students on the Field Specialization emphasis who have special education teaching experience, this will be replaced by 22:240, 22:245 and 22:290.)

Emphasis: The student may choose one of the following five emphases; and competency may be demonstrated through proficiency evaluation or course work.

Field Specialization:

Prerequisite: Teacher certification with appropriate disability approval. *Note:* No additional teaching certification endorsements or disability approvals can be requested through this emphasis program.

Required: 22:289 and 13 hours of electives to be selected and approved by the adviser and program committee.

Preschool Handicapped:

Required: 22:183; 22:187; 22:153; 22:255; 21:214; 21:192*
Required: 21:221 or ** 21:222
Required: 22:289 and 22:290 (these two courses taken concurrently)

Required: only for those with preschool handicapped endorsement and teaching experience (and to be taken concurrently): 22:240; 22:245; 22:290

*Required for students who do not hold the Early Childhood Education Endorsement 53 or the Preschool Handicapped Endorsement.

**21:22 to be taken by those with no previous early childhood background, and 21:222 to be taken by those with previous early childhood background.

Profound/Severe/Preacademic:

Required: 22:183; 22:253;
22:187, 22:289, 22:290 taken concurrently;
and 2-5 semester hours of electives from a selected list.

Elementary:

Required: 22:180; 22:182; 23:147; 23:192;
22:289 and 22:290 taken concurrently;
and 2-6 semester hours of electives from a selected list.

Secondary:

Required: 22:181; 22:182;
22:251, 22:189, 22:290 taken concurrently;
and 6-10 semester hours of electives from a selected list.

Note: Educational Strategist/Teaching Consultant Program

The special education offerings include an approval program for the preparation of special education resource strategists/teaching consultant which includes course work which is beyond the requirements for the master's degree but which may be completed near or at the end of the master's degree course work. The prescribed requirements for this program also may be completed while completing the appropriate Specialist in Education degree or after completion of the master's degree.

To be recommended for this approval, a student must have completed an acceptable master's degree (in special education or the equivalent), to be approved in at least one disability area (i.e., mental retardation, emotional disturbance, learning disabilities), have at least two years of teaching experience, and qualify for Endorsement 10, 20, or 35. A program sheet with specific details may be obtained from the departmental office.

A total of 30 semester hours is required as follows:

Phase I

Required: 22:170; 22:174; 22:192 (Tutorial)

Phase II

Required: 22:171; 22:192 (Group);
and two from the following: 22:180, 22:181,
22:183, 22:187.

Also required: 22:240; 22:245; 22:289 (2 hrs.); 22:290.

Student Personnel Services

The students must complete the usual degree and certification requirements and those for the particular endorsement being sought.

Major in Elementary Guidance and Counseling

This major requires a minimum of 40 semester hours.

Required: 25:205; 20:214 or 26:234.

Required: 29:103; 29:105; 29:203; 29:207; 29:210; 29:226; 29:227;
29:290 (3 hrs.); 25:181; 29:124 or 29:220.

Required: A minimum of 6 hours selected with adviser to provide depth in psychological, sociological or work-setting foundations.

Student must be certified as a teacher. One year of teaching experience or appropriate internship required for degree in this major.

Major in Secondary Guidance and Counseling

This major requires a minimum of 40 semester hours.

Required: 25:205; 20:214 or 26:234.

Required: 29:103; 29:105; 29:110; 29:203; 29:205; 29:124 or
29:220; 29:210; 29:226; 29:290 (3 hrs.); 25:181.

Required: Minimum of 6 hours selected with adviser to provide depth in psychological, sociological or work-setting foundations.

Student must be certified as a teacher. One year of teaching experience or appropriate internship required for degree in this major.

Major in College Student Personnel Services

This major requires a minimum of 34 semester hours.

Required: 25:205; 20:214 or 26:234.

Required: 29:230; 27:250 or 27:252;
29:289 College Student Personnel Services (2 hrs.);
29:289 Counseling and Student Problems (2 hrs.);
29:290 Practicum (two areas required for 6 hrs.):
Student Personnel Administration
College Counseling Services
College Student Housing
College Student Activities

Required: 29:105; 29:124 or 29:220

Required: 6 hours from: 27:250; 27:252; 25:180; 25:181; 29:110;
29:203; 29:205; 29:226; 29:227; 29:125; 29:240; 27:260;
29:299 (1-2 hrs.); or a course in Computer.

Certificate to teach is not required for this major.

Master of Business Administration Degree

Graduate study in business at UNI provides a broad, integrated program with emphasis in the functional areas of business and on selected, specialized techniques in order to provide a graduate with a balance between theoretical knowledge and practical business operations. The M.B.A. curriculum is designed to meet the needs of students with undergraduate backgrounds in the liberal arts, technical sciences, or engineering, as well as those with degrees in business.

The plan of study prescribed for the degree is structured to develop graduates who will have acquired (1) an understanding of the theoretical and practical aspects of the process of policy formulation and implementation, (2) a comprehension of environmental factors — economic, legal, social, and political — which affect the individual in the performance of managerial responsibilities, (3) an understanding of analytical techniques and the use of quantitative data in the administration of business controls, (4) the ability to communicate ideas effectively in oral and written form, and (5) a basic knowledge of selected functional areas within the field of business administration.

Admission to candidacy for the Master of Business Administration degree is dependent upon the quality of the applicant's undergraduate record and a test score on the *Graduate Management Admission Test*. The GMAT must be taken prior to acceptance in the program.

Major in Business Administration

This major is designed to qualify men and women for creative leadership in business. Students who enter the program with the undergraduate requirements of a baccalaureate degree in one of the areas of business will normally require 30 semester hours to complete the program; those who enter the program with a baccalaureate degree in an area other than business may be required to complete a proportionately greater number of hours. Candidates will be required to pass a comprehensive examination in the last semester of the program.

Required: 12:262; 13:263; 15:262; 15:263; 15:266; 15:267;
92:193;
15:289 Seminar — Business Policy — 3 hrs.

Electives: a minimum of 6 hours.

Detailed information for the M.B.A. may be obtained from the School of Business, UNI.



Master of Music Degree

Students wishing to take courses for graduate credit in the School of Music or wishing to pursue a degree program in this department should consult with the Graduate Coordinator for Music Programs prior to registration for the course. Detailed information concerning requirements and procedures will be provided, and specific evidence of previous accomplishments will be reviewed.

The Master of Music degree is a professional degree designed to prepare the graduate for (1) a college or secondary school teaching career, (2) a performance career as a professional musician or composer, or (3) further graduate work at the doctoral level. The following majors are offered:

Composition
Conducting
Music History
Performance

An applicant for a graduate degree program in the School of Music should possess the baccalaureate degree in music or a demonstrated equivalent. The student should have attained a high degree of proficiency in one or more of the following areas: performance, theory-composition, music education, music history. In addition to the common regulations and requirements applicable to all master's degree programs, the following are required for admission to the specific major:

Composition majors: portfolio and, if possible, tape recordings of compositions.

Conducting majors: in-person audition and interview.

Music History majors: scholarly paper.

Performance majors: in-person audition (a tape recording would be accepted if the in-person audition would pose undue hardship).

A prospective major must take a written diagnostic examination in the areas of theory and music history, and (if necessary) in the area of claimed competency if different from the above (e.g., piano, brass, or woodwind instruments). This examination normally is taken immediately prior to initial registration as a graduate student. If a student is required to take remedial courses to make up any deficiency in preparatory work, those courses may not be counted toward degree requirements.

Successful completion of a comprehensive examination is required of all students in this degree program. This examination normally will take place after the candidate has completed the course work required for the degree.

Major in Composition

This major requires a minimum of 30 semester hours and the completion of a composition recital acceptable to the student's recital committee.

Required: 52:221; 58:210; 58:211;
Applied composition (54:2xx) — 8 hrs.
Music literature (59:xxx) — 6 hrs.

Electives: 10 hours primarily in the areas of Music Literature and Theory.

Major in Conducting

This major requires a minimum of 30 semester hours completed in the following program:

Graduate Music Core — 12 hours

Required: 52:221; 58:210; 58:211; and

6 hours in Music Literature from any 59:1xxx courses.

Specialization — 18 hours

Required: 56:221* or 56:222* (for 6 hours); 59:131, 59:140 or 59:142 (for 3 hours); plus two (2) hours in Ensembles* (participation required each semester of residence).

(*56:221; 56:222, and Ensembles not offered during summers.)

Electives: as approved by adviser for a total of 7 hours.

Additional requirements: Conducting recital/document
Piano proficiency

Major in Music History

This major requires a minimum of 30 semester hours and the completion of a thesis in music history.

Required: 52:221; 58:212; 58:211;

59:299 Research for thesis — 6 hrs.

Music literature (59:xxx) — 13 hrs.

Electives: 5 hours (maximum of 2 hrs. may be in applied music.)

Major in Performance

This major requires the completion of a minimum of 30 hours (an Opera Emphasis requires minimum of 32 hours) and a performance recital acceptable to the student's recital committee.

Required: 52:221; 58:210; 58:211;

59:120 (2-4 hrs.);

Applied music (54:2xx) — 10 hrs.

Music literature (59:xxx) — 6 hrs.

Electives: 4-6 hours primarily in the areas of Music Literature and Theory.

Additional requirements: Two successful applied jury examinations (with minimum grade of B); and for voice majors, demonstrated proficiency in foreign languages.

Opera Emphasis: Students desiring an opera emphasis on the Performance major will complete a minimum of 32 semester hours. They may substitute special studies in opera role analysis for 58:210 and will register for a minimum of four (4) semester hours of Opera/Music Theatre (56:130 and 56:131) in place of Performance Literature for Voice (59:120). In addition, they will choose six (6) hours from a departmental list of courses (acting, directing, movement, production, for example) in lieu of other electives.

Outline of Organization and Requirements for Master's Degrees, University of Northern Iowa

	Master of Arts in Education	Master of Arts
A. Purpose and Objectives	<ol style="list-style-type: none"> 1. Preparation of school service personnel <ol style="list-style-type: none"> a. administrators b. supervisors c. counselors d. school psychologists 2. Advanced preparation of elementary and secondary teachers 3. Preparation of community college teachers 	<ol style="list-style-type: none"> 1. Graduate study in field specialization 2. Advanced preparation of elementary and secondary teachers 3. Preparation for college training
B. Program Options	<ol style="list-style-type: none"> 1. Thesis plan 2. Non-thesis plan 	<ol style="list-style-type: none"> 1. Thesis plan (open to all) 2. Non-thesis plan (except for majors in Geography, General Psychology, and Sociology)
C. Eligibility for Candidacy	<ol style="list-style-type: none"> 1. Unconditional admission to graduate study 2. General graduate examinations and dept. candidacy examinations passed 3. Hold or be eligible for Iowa Professional Certificate or equivalent* 	<ol style="list-style-type: none"> 1. Unconditional admission to graduate study 2. General graduate examination(s) and dept. candidacy examinations passed
D. Program Requirements	<ol style="list-style-type: none"> 1. On the non-thesis plan: at least one research paper approved by the department and filed in the departmental office 2. On all majors: <ul style="list-style-type: none"> 25:294 Educational Research — 3 hrs. 20:214 Advanced Educational Psychology — 3 hrs. or 26:234 Philosophy of Education 3. On some majors: <ul style="list-style-type: none"> Teaching experience as specified 	<ol style="list-style-type: none"> 1. On the non-thesis plan: at least one research paper approved by the department and filed in the departmental office 2. On certain majors: work outside the major, or competence in a foreign language, or Prof. Core A or B (see major for specific requirements) <ul style="list-style-type: none"> <i>Core A</i> (1) 20:214 or 26:234 — 3 hrs. (2) 25:294 — 3 hrs., or departmental research course (3) Methods course in major field, or 200-level course in Education or Teaching <i>Core B**</i> (1) 27:250 Teaching in College — 3 hrs. (2) 27:252 Current Issues in Higher Educ. — 2 hrs. (3) 297 Practicum — 2 hrs.
<p>*Except for majors in College Personnel Services, General Educational Psychology, and School Business Management.</p> <p>**Students completing Professional Core B with appropriate courses in one or more subject areas may be recommended for Iowa Community College certification.</p>		

Master of Business Administration — See p. 170 for specific information.

Master of Music — See p. 171 for specific information.

Specialist Degree

The requirements concerning candidacy, graduation, scholarship, residence, examinations, and thesis are the same as for the Specialist in Education degree. (See pp. 174-175.)

Major in Counseling

Admission to candidacy requirements are the same as for the Specialist in Education except the student is not required to complete the Professional Education Examination; requirements for residence, examination and thesis are the same as for the Specialist in Education.

The program is designed to better serve graduate students in the non-educational "Counseling" sector by affording students expanded specialized skills and understandings to complete a two-year program in pursuit of present and anticipated certification requirements. Students who plan to counsel in non-school settings such as churches, industry, student centers, employment services, domestic peace corps, job corps, and similar situations, and who major in this area will complete a basic core of courses applicable to all preparing for work as counselors. Courses in psychology and measurement are provided as a background. Specific areas of interest and the professional field in which the person plans to work will determine the supporting course work and the appropriate electives. Since persons working on this major will be interested in counseling activities in settings other than that of education, there will be no necessity for the student to hold a teaching certificate. The student's baccalaureate degree may be in liberal arts or a profession, including teaching, however.

This major requires a minimum of 30 semester hours post-M.A. or at least 60 semester hours if no M.A. degree was earned prior to candidacy for the specialist degree.

Required: 29:103; 29:105; 29:124; 29:125; 29:203; 29:205; 29:220; 29:226; 29:227; 29:240; 29:252; 29:299

Practicums/Internship: 15 semester hours

29:290 Practicum (3 hrs.)

Advanced Practicum (Support Area) (3 hrs.)

Practicum: Group Counseling (3 hrs.)

Internship (Support Area) (6 hrs.)

Required: Support area(s) with minimum of 8 hours each. Support area courses must be selected in consultation with major advisor and respective support area personnel. Support area examples: mental health, rehabilitation, corrections, substance abuse, employment agencies, etc.

Post-M.A. Counseling students will select 29:124 or 29:220; other appropriate 29:xxx courses, 29:299, 29:290 (at advanced, group and internship level), support area(s) courses (8 hours minimum respectively) and 1-11 hours of electives or additional hours for certification/licensure in support area or counseling. Standards for certification/licensure may vary from state to state.

Major in Science Education

For admission to candidacy, the student's program must be approved by the advisory committee and the chairman of the Science Education Faculty. In addition to examinations required for the specialists degree, this major requires examinations administered by the Science Education Faculty.

Each candidate's program will include an emphasis in a particular science discipline that is at least equivalent to an acceptable major on the M.A. program with Professional Core A. In addition, the emphasis must include any courses needed to match the specific UNI requirements for an undergraduate teaching major in that discipline, plus mathematics through the equivalent of 80:060. (Not all courses taken to meet this requirement will necessarily be eligible for graduate credit.)

Research experience (not necessarily as credit "Research") in both laboratory science and science education must be a part of the total post-B.A. program. Not more than six (6) hours of research credit may be included in the 30 (or more) hours of post-master's credit.

Information concerning details of the major and emphases is available in the office of the Dean of the College of Natural Sciences.

Required Science — minimum of 30 hours, including 82:200, selected from biology, chemistry, earth science, and physics. Must include at least 12 hours in science outside the area of emphasis, preferably in two different disciplines.

Required Research, Thesis and related courses — 12-19 hours.

25:205

8x:299

Thesis (if optional or required)

3 of the following: 25:180 or 80:172; 81:101; 82:288 (1-2 hours); 25:281

Required Internship — 4-6 hours

28:250 (2-4 hours); 82:280

Required Education — 6-8 hours

20:214 or 26:234

and 2 of the following: 25:280; 27:227; 21:142; 27:220

Additional hours required (0-8 hours) may be selected from:

- any course listed above but not required
- any 100g or 200-level mathematics course
- any course numbered 82:1xxg or 82:2xx
- 82:280 (taken as a Professional Core A requirement in a master's program)
- 27:226; 20:191; 24:137

Specialist in Education Degree

The Specialist in Education degree is designed to serve a qualitative need for highly trained specialists in various fields of educational endeavor. Many salary schedules have recognized advanced preparation beyond the master's degree, but such recognition is often based on a collection of hours not necessarily representing a planned program of study. The Specialist in Education degree requires careful planning with the resultant advantages. It is a program designed to meet the needs of students in professional areas in which the master's degree is not sufficient, but in which the rigorous research emphasis of the doctorate is not necessary. The sixth year of preparation is being recognized in certification standards of several states and as a membership requirement in the American Association of School Administrators.

The program at the University of Northern Iowa leading to the Specialist in Education degree involves breadth of preparation as well as depth in a particular field of specialization. Persons majoring in a professional area of specialization will take work in cognate fields to help develop this broadened base of understanding, such work to be determined in cooperation with the student's adviser. At the same time the program is flexible enough to permit variation in accord with individual backgrounds and aspirations. The flexibility is such that persons with the master's degree in either professional education or in an academic area may participate in the program.

Majors are available in the following areas:

Business Education

Business Education

Curriculum and Supervision

*Curriculum Coordinator
Elementary Consultant
Secondary Consultant*

Educational Psychology

*Evaluation
School Psychology*

Reading

Reading Education

School Administration

*Superintendent
Elementary Principal
Secondary Principal*

School Business Management

School Business Management

Special Education

*Special Education
Administration Emphasis
Curriculum Consultant Emphasis*

Student Personnel Services

*Director of Guidance Services
Elementary Guidance and Counseling
Secondary Guidance and Counseling
College Student Personnel Services*

Detailed information for each of the above program areas may be obtained from the head of the department offering the major. These include:

*Department of Business Education and Administrative Management
Business Education*

*Department of Curriculum and Instruction
Reading*

*Department of Educational Administration and Counseling
Curriculum and Supervision
School Administration
School Business Management
Student Services*

*Department of Educational Psychology and Foundations
Educational Psychology*

*Department of Special Education
Special Education*

The programs leading to this degree are open to students who hold a master's degree from an accredited graduate school, who have had at least one year of teaching experience, and who meet the requirements set forth below.

With special approval, the student may work directly toward the Specialist in Education degree without going through a master's degree program.

Admission to Candidacy

A student must successfully complete the following examinations: (a) the Aptitude Test of the Graduate Record Examination, (b) Professional Education Examination, and (c) Departmental Examinations; however, the major in College Student Personnel Services involves only parts (a) and (c).

A student's application, including program, must be approved by the departmental committee, the head of his or her department, the dean of the appropriate college and the Dean of the Graduate College. Normally the student may be admitted to candidacy during or immediately following the first semester of enrollment following the receipt of the master's degree, but capable students may be admitted to candidacy for the Specialist in Education degree at any time after being admitted for the master's degree.

Graduation Requirements

The student shall complete the general requirements for the Specialist in Education degree and shall meet the requirements as specified by the departmental committee using a combination of graduate courses taken for the master's degree and beyond. The student must be eligible for certification as a teacher, if required for the major, before the degree will be granted. In some cases, appropriate certification endorsement will be recommended for those who meet the standards set by the university in conjunction with the appropriate certification agency. Receipt of the degree is not a necessary prerequisite to recommendation for the appropriate endorsement(s) unless state standards require such. Students seeking only specific endorsement will not be required to secure admission to candidacy, complete the thesis requirement, or take comprehensive examinations. A cumulative graduate grade point average of 3.00 or better will be required prior to recommendation for endorsement(s).

Hours of Credit. A student must earn a minimum of 30 semester hours of graduate credit beyond the master's degree. Credit earned in excess of that required for the master's degree may be applied toward the 30-hour requirement if that credit is earned during the final period of enrollment for the master's degree.

Certain limitations on the amount and kinds of credit must be observed:

200-Level Credit. A student must earn at least 24 semester hours of credit in courses numbered 200 or above, counting both the master's and the post-master's work but not counting any *Research* credit.

1. **Research Credit.** The provisions regarding research credit are the same as those for the master's degree and in addition to the amount of such credit used toward the master's degree. (See p. 154). Not more than six (6) hours of research credit can be included in the 30 (or more) hours of post-master's credit.
2. **Recency of Credit.** Courses taken more than 7 years prior to the granting of the degree cannot be used to meet degree requirements.
3. **Transfer Credit.** In addition to the transfer credit permitted on the master's degree, 8 semester hours of transfer credit for *post-master's* work may be applied toward the degree of Specialist in Education.
4. The regulations regarding credit in correspondence courses, and radio and television classes are the same as those for the master's degree. (See p. 153.)

Scholarship. A cumulative grade index of 3.00 (B average) must be earned at the University of Northern Iowa in all courses attempted after receiving the master's degree. No credit toward graduation is allowed for a course in which a grade below C is earned.

Candidacy. The requirements for admission to candidacy are described above.

On Campus Residence. A student must have completed at least 18 hours in residence credit on campus, including one semester or two summer sessions of fulltime enrollment in residence after the master's degree.

Examinations.

- (a) A student must pass a comprehensive oral examination, including a defense of the thesis, if any. The examination will be conducted and evaluated by the departmental committee and a faculty member designated by the Dean of the Graduate College, although other members of the faculty may participate.
- (b) A student may be required by the departmental committee to pass a written comprehensive examination. If required, it should precede the oral examination.

Thesis. A student who did not complete a thesis for the master's degree must complete one for the specialist's degree. A department may require a student who has written a master's thesis to write a thesis for the specialist's degree also. The thesis must be presented in the style and form prescribed for the master's thesis. It must have the approval of the thesis committee and the Dean of the Graduate College.

The work on a thesis will normally be considered to involve about 6 semester hours of credit. To earn this credit, a student registers for *Research* and usually not in one block. The instructor will assign a grade for a semester's registration in *Research* based upon the progress made, but may assign a *Research Continued (RC)* if the instructor feels the work has not reached the place where it can be evaluated. Registration for the last segment of *Research* credit (for work on a thesis) should not be made until the thesis is near completion. The Dean of the Graduate College may authorize an extension of time for the completion of a *Research Continued* in *Research* up to one additional calendar year but if at the end of that time the work has not been completed, the grade of *RC* will be changed to an *F (Failure)*.

Completion of the thesis project occurs when the thesis has been approved by the thesis committee and the Dean of the Graduate College.

The Dean of the Graduate College will appoint three members of the Graduate Faculty as an advisory committee to guide the student in selecting and completing an appropriate thesis project.

Filing of Thesis and Abstract of Thesis. The same regulations apply as for the master's degree. See p. 154.

Application for graduation. The same regulations apply as for the master's degree. See p. 155.

Attendance at Commencement. The same regulations apply as for the master's degree. See p. 155.

Requirements For Various Majors

Course work requirements for the Specialist in Education degree are defined in terms of a two-year graduate program, including work taken on the master's degree. A minimum of 60 semester hours is required for completing the program.

Worksheets giving complete details of the various majors and emphases are available in the offices of the departments in which the majors are offered.

Business Education

Major in Business Education

The Graduate Record Examination (GRE) must be taken prior to acceptance into the Specialist in Education degree major in Business Education. Admission to candidacy to the program is dependent upon the quality of the applicant's undergraduate record and test scores.

Students must have earned a degree from an AACSB accredited school of business program or are required to complete the following courses, or equivalent courses: 12:030; 12:031; 13:152; 15:020; 15:080 or 18:070; 15:100; 15:151; 15:153; 15:154; 92:053. Credit earned in these courses may not be applied to the requirements for this major.

The number of hours in business-related courses, counting both undergraduate and graduate hours, must total at least 60 hours. At least 15 hours of business-related courses must be taken during the student's sixth-year program.

Required: 17:207; 17:210; 17:234; 17:280; 17:299; 18:220; 20:214; 25:205; plus 8 semester hours in cognate fields (these could include economics, education, psychology, and mathematics.)

Students seeking to be college teachers, supervisors, or to hold certain administrative posts in the field of business or vocational education will need to select courses particularly suited to the desired goal. Such courses should be made a part of the candidacy program.

Curriculum and Supervision

The programs in curriculum and supervision provide preparation to serve as curriculum director or consultant in city and county systems or college instructor. Competency is required through examination or the following courses: 25:181; 25:180.

General requirements: 20:214; 24:131; 26:234; 25:205; 27:141; 27:204 or 27:210; 27:290; plus 8 semester hours of non-professional course work.

Major in Curriculum Coordinator

Must hold a certificate for elementary or secondary teaching prior to completing the program.

Required: 27:212; 27:220; 27:226; 27:227.

Major in Elementary Consultant

Must hold a certificate for elementary teaching prior to completing the program.

Required: 27:226; 27:227.

Major in Secondary Consultant

Must hold a certificate for secondary teaching prior to completing the program.

Required: 27:226; 27:227.

Educational Psychology

The major in Evaluation provides preparation in the area of research and measurement in schools and in higher education. The major in School Psychology prepares a student to apply principles and techniques from psychology to the process of (a) identifying the dynamic forces in the child, his/her family, and his/her social environment which are affecting the child's learning and development, and (b) developing solutions to the problems generated by those forces.

Major in Evaluation

Competency is required through examination or the following courses: 40:008; 20:100 or 20:116, 25:181, 25:180.

Required: 20:139; 25:281; 25:282; 25:283; 25:205; 29:203;
8 semester hours of non-professional course work.

Required: 20:214; 26:234; 29:102; 27:220 or 27:227; 25:280;
80:172; 25:289 Evaluation — 2 hrs.
25:289 Research Problems — 2 hrs.

Major in School Psychology

The completion of the following courses (or their equivalents) is required in the student's undergraduate preparation, and students who are deficient in any of these courses must make up the deficiency in addition to the specific courses required for the graduate major program:

Psychology: 40:008; 40:151; or 25:181; 20:142 or 40:125 or
40:142; 20:100, 20:109 or 20:116; 40:118

Education: 21:152; 22:150; 26:120

Required minimum program; 20:214 or 26:234; 20:230 20:240;
20:270; 20:289; 20:290; 25:180; 25:281; 25:282; 25:283;
25:205;

20:194 — 6 hrs.; 20:291 — 6 hrs.; 20:299 — 6 hrs.;

two approved courses in counseling;

one approved course in speech or language development;

one approved course in reading.

Reading

Major in Reading Education

To be eligible for a degree in this major the student must be certified as an elementary or secondary teacher. This program is designed to prepare teachers to serve as a consultant, coordinator, or supervisor of school reading programs.

Required, if not completed on the undergraduate level: a course in elementary reading methods; a course in secondary reading methods,

a course in children's literature; a course in adolescent literature; courses in child and adolescent development; 23:132; 23:140; 23:147; 23:192; 25:180; 25:181.

Required: 20:214 or 26:234; 25:205; 23:210; 23:212; 23:238; 23:289; 23:290; 23:289 (Administration and Supervision of Reading Programs); 23:290 (Supervision of School Reading Programs);

a course in curriculum development;

two 200-level courses in educational psychology or learning; and 6 semester hours of approved electives.

Persons who complete this program and the following requirements qualify for certificate endorsement as a Reading Clinician (No. 38):

two years of teaching experience; 23:240.

Persons who complete this program and the following requirements qualify for certificate endorsement as a Reading Specialist (No. 54):

four years of teaching experience including one year as a reading teacher; 23:240.

School Administration

The sixth-year program in administration prepares qualified people to serve as superintendent, assistant superintendent, business manager, or principal, or to teach in related areas at the college level.

The student must hold a certificate to teach in the elementary or secondary school and must have successfully completed one year of teaching at the elementary or secondary level prior to completing the degree. (Check certification requirements.)

General requirements: 25:205; 20:214 or 26:234; 25:180; 27:201; 27:240; 27:241; 27:210; 27:141; 25:181; 27:289; 27:290; 27:230.

One course in educational psychology, or guidance.

8 semester hours of non-professional course work.

Major in Superintendent

Required: 27:220; 27:221; 27:227; 27:228.

Major in Elementary Principal

Required: 27:212; 27:220; 27:221.

Major in Secondary Principal

Required: 27:226; 27:227; 27:228.

School Business Management

Major in School Business Management

This major is offered by the Department of Educational Administration and Counseling. The program is as follows:

Required: 25:205; 20:214 or 26:234; 27:201; 27:230; 27:240; 27:243; 27:210; 27:241.

Electives as approved by chairman.

Special Education

Major in Special Education

Administration Emphasis:

To be eligible for this degree, the student must be certified as a teacher of the handicapped or as a school psychologist or speech and hearing clinician.

Required: 25:205; 20:214 or 26:234; 27:280; 22:184; 22:252; 22:278; 22:289; 22:290; 27:201 or 27:228 or 27:221; 27:210 or 27:204 or 27:141 or 27:212 or 27:226.

plus

Two courses in mental retardation, emotionally disturbed or speech correction, and

8 semester hours chosen from non-professional course work.

Curriculum Consultant Emphasis:

The emphasis prepares the qualified person to serve as a curriculum consultant for special education in local, intermediate, or state school systems provided that certification standards for such positions are met, including degree, approval, and teaching experience (type and duration) requirements. An adviser should be consulted on the specifics of certification requirements.

To be eligible for this degree, the student must be certified as a teacher of the handicapped upon completion of the program requirements, and the student should consult a department adviser regarding the course work required for this certification if such has not yet been completed. To enter the program, the candidate must have completed at least one year of successful teaching, although more are recommended.

Required: 25:205; 20:214 or 26:234.

Required (to be taken concurrently): 22:240; 22:245; 22:290.

Required: 22:289; 22:290; 22:278; 27:230; 27:220 or 27:227; 27:212 or 27:226.

Required: 8 semester hours chosen from non-professional course work.

Student Personnel Services

The appropriate program in student personnel services may lead to counseling work in the elementary or secondary school, colleges or universities.

The major in the area of Student Personnel Services, with the exception of the major in College Student Personnel Services, must comply with the following: In consultation with an adviser, the student will complete a minimum of twelve (12) semester hours in psychological and/or sociological foundations from courses with the following department prefixes: 20, 22, 25, 26, 27, 31, 40, or 98, which must include a course in Psychology of Personality and a course in Abnormal Psychology.

Major in Director of Guidance Services

Must be certified as a teacher and must have successfully completed one year of teaching at the elementary or secondary level. (Check certification requirements.)

Required evaluation and research: 20:270, 25:180, 25:181; 25:205.

Required: 29:103; 29:105; 29:110; 29:125; 29:220 or 29:124; 29:203; 29:205; 29:210; 29:207; 29:226; 29:227; 29:235;

29:290 Elementary Counseling Practicum — 3 hrs.

29:290 Secondary Counseling Practicum — 3 hrs.

29:290 Group Counseling Practicum — 3 hrs.

Required: Thesis (6 hrs.)

Major in Elementary Guidance and Counseling

This program in student personnel services is designed to qualify an individual for counseling work in the elementary school.

The student must hold a certificate to teach in the elementary school and have successfully completed one year of elementary school teaching before completing the program. (Check certification requirements.)

Required evaluation and research: 25:181; 25:205; 20:214 or 26:234.

Required: 29:103; 29:105; 29:205; 29:207; 29:124; 29:220; 29:227; 29:203; 29:226; 29:210; 29:240.

Required: 29:290 Practicum

Elementary Guidance — 3 hrs.

Advanced — 3 hrs.

Internship — minimum 6 semester hours.

Required: 5 hours to be selected in consultation with adviser.

Thesis (1-6 hrs.)

Major in Secondary Guidance and Counseling

This program in student personnel services is designed to qualify an individual for counseling work in the secondary school.

The student must hold a certificate to teach in the secondary school and have successfully completed one year of secondary school teaching before completing the program. (Check certification requirements.)

Required evaluation and research: 25:181; 25:205; 20:214 or 26:234.

Required: 29:103; 29:110; 29:105; 29:124; 29:220; 29:203; 29:205; 29:226; 29:210; 29:227; 29:240.

Required: 29:290 Practicum

Secondary School Guidance — 3 hrs.

Advanced — 3 hrs.

Internship — minimum of 6 hrs.

Required: 5 hours to be selected in consultation with adviser.

Thesis (1-6 hrs.)

Major in College Student Personnel Services

This program is designed to qualify an individual for counseling and/or administrative work in student personnel services in college or university settings.

General requirements: 25:205; 20:214 or 26:234.

Required: 29:230; 27:250; 27:252; 29:105; 29:124 or 29:220

29:289 Seminar: Counseling and Student Problems

29:289 Seminar: Student Services

29:290 Practicum (3 areas required)

Student Personnel Administration — 3 hrs.

College Counseling Services — 3 hrs.

College Student Housing — 3 hrs.

College Student Activities — 3 hrs.

Internship — minimum 6 semester hours.

Electives to be selected in consultation with adviser.

Thesis (1-6 hrs.)

Doctor of Education Degree

This new program, approved in 1982 and initiated in 1983, is intended to provide practicing educators the opportunity to continue their study and earn the terminal professional degree in their field. The Ed.D. degree requires a minimum of 60 semester hours of credit beyond the master's degree. There are three components to the program: 27 semester hours in a *Professional Common Core* of work in educational foundations, fundamentals, and research; 21-24 semester hours of *Advanced Professional Study* in one of six areas of intensive study and a related area; and a *dissertation* of 9-12 semester hours.

By design, then, *all* students are required to study in basic areas that undergird and define educational practice and develop skills of problem definition, data collection and analysis, and interpretation. The six areas of intensive study provide for a specialized focus on practice. The six intensive study areas are: *Counseling*, *Curriculum and Instruction*, *Educational Administration*, *Reading*, *School Psychology*, and *Special Education*. (In some areas, it is possible to combine doctoral degree study with work toward an endorsement to perform a particular role in K-12 education.) Brief definitions of the six areas follow.

Counseling. This area of intensive study involves continued development of knowledge and skills of educational professionals who assist others in clarifying, coping with or solving personal, academic, or career dilemmas. (For more information, contact the Head, Department of Educational Administration and Counseling.)

Curriculum and Instruction. This area of intensive study is designed to prepare scholar-practitioners to plan, implement, evaluate, and supervise educational programs for children and adult learners. (For more information, contact the Head, Department of Curriculum and Instruction.)

Educational Administration. This area of intensive study involves the preparation of personnel for leadership roles in administering and supervising departments, schools, districts, or other educational agencies. (For more information, contact the Head, Department of Educational Administration and Counseling.)

Reading. This area of intensive study is designed to prepare scholar-practitioners to assume leadership roles in reading-language arts programs. (For more information, contact the Head, Department of Curriculum and Instruction.)

School Psychology. This area of intensive study is designed to provide school psychologists with additional theory and practice skills to serve families, children and educators in a leadership role. (For more information, contact the Head, Department of Educational Psychology and Foundations.)

Special Education. This area of intensive study is designed to provide students with the knowledge and skills to work effectively in leadership positions in special education agencies, residential facilities, or other agencies that serve disabled individuals. (For more information, contact the Head, Department of Special Education.)

Admission to Doctoral Study

Initial Admission

Formal application to doctoral study should be made to the Registrar at the University of Northern Iowa. Concurrently, a separate application should be sent to the Office of the Dean of the College of Education. Descriptive materials and application packets may be obtained from either office. To be considered for degree status (regular) admission an applicant must submit completed application

forms, transcripts of all undergraduate and graduate work, three letters of recommendation and meet the requirements enumerated below. Additional criteria may be required by the area of intensive study since some previous specialization work is presumed.

1. Hold a master's degree from a regionally accredited institution of higher education.
2. Have three years of appropriate educational experience.
3. Have at least a 3.2 (on a 4.0 scale) grade point average on all previous graduate work.
4. Have a combined score of 1500 or greater on the Graduate Record Examination (GRE) with no score below 460 on any one of the three separate areas: Verbal, Quantitative, Analytical.
5. Have a score of 460 or greater on the Graduate Record Examination Advanced Test in Education.
6. A foreign student applicant must achieve a score of at least 550 on the Test of English as a Foreign Language (TOEFL) examination.

The three letters of recommendation should come from individuals familiar with the applicant's potential for advanced professional studies, at least one from a professor familiar with the applicant as a graduate student and at least one from an educational employer/supervisor.

Provisional degree status *may* be recommended for an applicant who does not meet all of the requirements or for whom it is felt that further graduate coursework or professional experience would be useful in making the admission decision. An individual admitted to provisional degree status must be formally reconsidered for regular admission and coursework completed during that time must be subsequently approved by an appropriate faculty committee before it may be applied to a degree.

Candidacy Status

Soon after regular admission, an adviser and an advisory committee will be appointed for each student by the Dean of the Graduate College. In most instances the adviser (and chairperson of the advisory committee) will be from the student's area of intensive study. Prior to the completion of twelve semester hours of coursework toward the doctorate at the University of Northern Iowa, the student will meet with this committee, convened by the adviser, and develop a program of study for submission to the Graduate College. Approval of the program of study will signify admission of the student to candidacy status.

General Regulations

1. **Scholarship.** A cumulative grade point average of 3.0 or above (on a 4.0 scale) must be maintained for all coursework taken toward the Doctor of Education degree at the University of Northern Iowa. No more than six (6) semester hours of C credit (C+, C, C-) earned within the program of study may be applied toward credit for graduation.
2. **Recency of Credit.** Courses taken more than seven years prior to the granting of candidacy status cannot be used to meet degree requirements.
3. **Transfer Credit.** Usually a maximum of fifteen hours of credit from regionally accredited graduate institutions may be applied toward meeting minimum credit hour requirements for the Doctor of Education degree (subject to the Recency of Credit regulation). Usually not more than three hours of acceptable transfer credit may be applied toward any given subcomponents of the *Professional Common Core*.

All transfer credit, including work taken prior to formal admission, is subject to review by the Office of the Dean of the Graduate College, Office of the Dean or Associate Dean of the College of Education, and the College Committee for Doctoral Study. The student's doctoral advisory committee will make recommendations regarding the applicability of transfer credit.

4. **Residence Credit.** Usually following receipt of candidacy status, the doctoral candidate must be enrolled in on-campus study for a minimum of twenty-one (21) semester hours over a continuous two-term period. The on-campus residency requirement may be met by holding a graduate assistantship for two consecutive semesters. Persons serving as graduate assistants will be considered full time if they carry at least nine (9) semester hours per semester in addition to the assistantship. The continuous two-term period will be defined as consecutive academic year semesters or an academic year semester and an adjacent eight-week summer session. Dissertation credit may not comprise more than one-half of the coursework pursued during either of these two consecutive terms.
5. **Maximum Academic Load.** The maximum graduate load during an academic year semester is fifteen hours; for the eight-week summer session eight hours is the normal maximum; and for shorter pre- and post-sessions, maximum graduate load is normally calculated at one semester hour per week of course contact work.
6. **Level of Courses.** Credit earned as part of the candidate's program of study will be earned in courses which are at the graduate level. No more than ten hours of credit at the 100g level (upper-level undergraduate and lower-level graduate) may apply toward this program of study.
7. **Examinations.** The following examinations are required of all students enrolled in the Doctor of Education program:
 - a. **Doctoral Comprehensive Examination.** The candidate requests permission to take this examination through the Office of the Associate Dean, College of Education. Normally, such a request is made during the term prior to the administration of the comprehensive examination. The doctoral comprehensive examination is governed by the following conditions:
 - 1) The candidate will have completed eighty (80) percent of his/her program of study exclusive of dissertation credit.
 - 2) The examination, prepared and evaluated by the candidate's doctoral advisory committee, will usually be administered in written and oral form.
 - 3) The candidate should have satisfied the evidence of research proficiency requirement prior to taking the doctoral comprehensive examination.
 - 4) A candidate may be permitted to take the doctoral comprehensive examination a second time. (A third attempt will occur only under very unusual conditions; special permission must be sought and received.)

(Note: Upon successful completion of the Doctoral Comprehensive Examination, the degree candidate achieves the status of active candidate.)
 - b. **Doctoral Dissertation Examination.** Upon completion of his/her doctoral dissertation, the active candidate will request and submit to a public examination over the content, design, and methodology used in conducting the dissertation research.

8. **Doctoral Dissertation Proposal.** When the student has achieved active candidate status, he/she, in conjunction with his/her adviser, should make arrangements to present the dissertation proposal to the doctoral advisory committee as a group. The membership of this committee will typically be expanded at this point by the Graduate Dean appointing one member from outside the College of Education. Other membership changes may also be appropriate at this time. Formal work on the dissertation may not proceed without approval from this committee.

9. **Time Limitation.** The program of study for the Doctor of Education degree must be completed within seven calendar years from the date that admission to candidacy is granted. Extensions in this time requirement should be the exception and will be granted only for good cause. Such extensions may be granted by the Dean of the Graduate College.

10. **Dissertation.** A dissertation is required of all candidates for the Ed.D. degree. It will involve no less than nine and no more than twelve semester hours of credit. The first three hours will be Dissertation Seminar. Regulations governing the physical appearance (format) may be obtained from the Office of the Graduate Dean. The dissertation must be in final copy form before doctoral advisory committee members may affix their signatures for approval. No later than two weeks prior to graduation, three unbound copies of the approved dissertation are to be submitted to the Office of the Graduate Dean.

11. **Abstracts of Dissertation.** Three (3) copies of an abstract of the dissertation must be filed in the Graduate College office at the time of final deposit of the dissertation. Regulations for the dissertation also apply to the abstract. The abstract must not exceed 600 words in length. Please see the *Dissertation Manual* for details.

12. **Microfilm Agreement.** A "Microfilm Agreement" and "Survey of Earned Doctorates" must be completed and returned to the Graduate College office with the final dissertation.

The University of Northern Iowa participates in a program sponsored by the Association of Research Libraries and conducted by University Microfilms, Ann Arbor, Michigan, for reproduction of doctoral dissertations on microfilm. If the dissertation has been copyrighted, this information must be included on the university agreement form.

13. **Dissertation Fees.** Several fees are required in connection with the dissertation; these include:

- a. A binding fee for the library and department copies of the dissertation. If a student wishes to bind additional copies, individual arrangements with a binder must be made.
- b. A microfilm fee to cover the cost of microfilming the dissertation and publishing the abstract.
- c. A copyright fee if the student wishes to have the dissertation copyrighted.

Students should check with the Graduate College office or the current *Dissertation Manual* for the amount of each of the above fees.

The binding, microfilming, and copyrighting fees must be paid at the UNI Business Office and a copy of the receipt submitted to the Graduate College office at the time the final copy of the dissertation is deposited.

14. **Application for Graduation.** Active candidates for the Doctor of Education degree must make application for graduation on

appropriate university forms. These forms may be obtained from the Office of the Registrar. Active candidates must file application for graduation by the deadline dates designated by the Registrar and published in the *Graduate College Bulletin*.

15. **Attendance at Commencement.** The candidate for the Doctor of Education degree is expected to secure the appropriate academic costume and appear at commencement for the awarding of the degree.

Program Requirements: Doctor of Education

The program of study consists of three components: the Professional Common Core, Advanced Professional Studies, and the Dissertation. While there are discrete elements in the program, ideally all of the work should be seen as interrelated and focused on a professional career interest. The dissertation, especially, should be seen as an integrating, culminating experience rather than as an "add on" following coursework.

- I. **Professional Common Core** — 27 hours. This component, in turn, has three subcomponents:
 - A. Educational Foundations 9 hours
20:314 Advanced Educational Psychology — 3 hours
and
26:334 Advanced Philosophy of Education — 3 hours
and
26:235 History of American Education — 3 hours
or
26:220 Sociological Perspectives on Schooling — 3 hours
 - B. Educational Fundamentals 9 hours
27:225 Organization, Governance, and Administration of Public Education — 3 hours
and
27:230 School Laws — 3 hours
and
21:352 Curriculum Theory and Development — 3 hours
 - C. Educational Research 9 hours
25:180 Statistical Methods in Education and Psychology — 3 hours
and
25:281 Topics in Statistical Analysis — 3 hours
and
25:300 Descriptive Educational Research — 3 hours
or
25:301 Advanced Experimental Research in Education — 3 hours
or
25:302 Qualitative Methods in Educational Research — 3 hours

II. Advanced Professional Studies — 21-24 hours

This is the component of the program that relates to and supports the student's professional career goal. Students will elect one of six areas of intensive study. Specific course requirements for individual students will depend on faculty requirements and student background, interests, and goals. The only program limitations on work in this component are that the coursework (including seminars, practica, independent readings, and independent research) be at the 200 or 300 level and that there be at least some work (related study) in an area other than the elected area of intensive study. The six areas of intensive study are:

Counseling
Curriculum and Instruction
Educational Administration
Reading
School Psychology
Special Education

III. Dissertation — 9-12 hours

This is the program component in which the student demonstrates proficiency in the integration of theory and practice, i.e., it involves the application of existing knowledge and/or results of individual research to an educational problem or situation.

19:389 Dissertation Seminar — 3 hours
and

19:399 Dissertation Research — 6-9 hours

Note: *It is possible that not all course options will be offered in the initial stages of program implementation.*



Doctor of Industrial Technology Degree

The University of Northern Iowa offers the Doctor of Industrial Technology degree in an endeavor to meet the increasing need for advanced degree work in this field of knowledge. Industrial technology is a relatively new and rapidly expanding knowledge base for a wide variety of professional fields, including industrial arts, trade and industrial education, technical institute education, and industrial technology. This new degree program includes the study of the technological systems used in industry and their effect on society and culture.

The Doctor of Industrial Technology degree is designed to develop scholars in the field of education and industry. Programs emphasize the development of a thorough knowledge of (a) industrial technology as an intellectual discipline, (b) the behavior of the technological systems used in industry and their effect on people and the environment, and (c) the potential and limitations of possible future developments in technological systems and their utilization in industry. Program emphasis is on providing the intellectual tools necessary to pursue scholarly research and applied practice in the field of industrial technology while developing in each student the interest and desire to commit the time and effort required for a leadership role in improving current education and industry programs and determining directions for future programs. The degree program requires a minimum of 64 semester hours of credit completed beyond the master's degree.

Graduates of the Doctor of Industrial Technology degree programs will be prepared for one or more of the following professional careers:

1. Teachers of industrial arts, trade and industrial education, technical institute education and industrial technology in secondary schools, colleges and universities.
2. Supervisors and consultants for secondary, college, and university-level industrial arts, trade and industrial education, technical institute education, and industrial technology programs at the local, area, state, regional, and national levels.
3. Administrators of industrial arts, trade and industrial education, technical institute education, and industrial technology programs as directors or department heads, or as deans.
4. Researchers and research coordinators for education and industry in specific content fields in industrial technology.
5. Designers, coordinators and directors of industrial training programs, and related industrial applications.

Admission to Doctoral Study

Application for Admission

Anyone possessing the master's degree in Industrial Technology, Industrial Arts, Technology or a related technical program, from any accredited institution may apply for admission to the Doctor of Industrial Technology degree program. Application is made through the Dean of the Graduate College. Individuals indicating an interest in the program will be given appropriate application forms, a description of the program, and a copy of the policies and procedures which apply to this degree.

Applicants in the final semester or summer session of work on the master's degree may submit application materials and be admitted on *provisional degree status* until the master's degree is completed.

Types of Admissions

Admission to the Doctor of Industrial Technology degree program may be granted on a *degree status* or *provisional degree status* basis.

1. Degree Status Admission.

- a) The applicant must hold a master's degree with an education or industry specialization in a content field in or related to industrial technology; the degree must have been granted by an accredited institution.
- b) Each applicant must have an overall grade point average of 3.2 on all prior graduate coursework.
- c) The applicant must have completed the Graduate Record Examination and achieved a minimum combined total score of 1500 on the verbal, analytical, and quantitative sections of this examination with a minimum of 400 for each section.
- d) Three references from persons familiar with the academic and professional potential of the applicant must be submitted which support the applicant's request for admission to the program.
- e) Applicants for whom English is not their first language must complete the Test of English as a Foreign Language Examination (TOEFL) and achieve a score of at least 550.
- f) Each applicant must have a minimum of three years of professional-level educational or industrial experience in or related to the major content field of specialization. Individuals without this experience may be admitted to the program but appropriate professional experience must then be included in the program of study. What constitutes appropriate professional experience will be determined by the student's faculty advisory committee and this requirement will be included in the student's program of study.
- g) All applications for admission will be reviewed by the Department of Industrial Technology Graduate Committee. The committee may recommend degree status only if the candidate meets all the above requirements. *Provisional degree status admission may be recommended* if an applicant does not meet all the above requirements or if the committee believes further graduate coursework or professional experience is desirable prior to an applicant's being approved for *degree status* admission. The committee may require a personal interview with an individual before taking action on an application for admission.

2. Provisional Degree Status Admission.

Applicants who do not meet all requirements for degree-status admission or are recommended only for *provisional degree status* admission by the Department of Industrial Technology Graduate Committee must meet one or both of the following criteria before they may be reconsidered for *degree status*:

- a) All deficiencies for admission to degree status have been removed.
- b) A full graduate load of eight (8) semester hours for a summer session or twelve (12) semester hours for a semester is completed in coursework recommended by the faculty adviser appointed by the department head with a minimum grade point average of 3.2. Coursework completed while the individual is on provisional degree status admission may be applied toward degree requirements only

if it is subsequently approved by the faculty advisory committee assigned to the student.

Faculty Advisory Committees

After degree status admission has been granted, a faculty advisory committee will be appointed by the Graduate Dean in consultation with the head of the Department of Industrial Technology. The student and the faculty adviser will be responsible for recommending members for appointment to the faculty advisory committee. The committee will consist of three (3) members from the Department of Industrial Technology and two (2) members outside the department. A committee member from within the Department of Industrial Technology will serve as chair. The five committee members must be members of the University of Northern Iowa Graduate Faculty. This advisory committee shall have responsibility for the following:

1. Personal interview with student after completion of candidacy examination.
2. Approval of the application for candidacy and program of study for the individual student.
3. Preparation and evaluation of comprehensive written and oral examinations.
4. Determination of any remedial requirements after comprehensive written and oral examinations are completed.
5. Approval of publication requirement before allowing student to submit dissertation proposal.
6. Approval of dissertation proposal and supervision of dissertation effort.
7. Final approval of completed dissertation.
8. Preparation and evaluation of oral examination over dissertation.
9. Recommendation of candidate for degree. Four of the five committee members must approve all actions of the committee.

Admission to Candidacy

Students will usually apply for admission to candidacy and submit programs of study for approval during their first semester or second summer session in residence. All coursework in progress or completed prior to applying for admission to candidacy must be subsequently approved by the faculty advisory committee in order to be counted on a student's program of study.

Admission to candidacy and program of study approval will be recommended to the Department Head and to the Dean of the Graduate College only after a formal interview of the student has been conducted by the faculty advisory committee.

The program of study submitted with the admission for candidacy must include a statement relating to the career goals of each candidate along with a list of specific competencies the student expects to attain through activities associated with program requirements.

Any changes made in program-of-study requirements after the application for candidacy has been submitted must be approved by the faculty advisory committee and the Dean of the Graduate College.

General Regulations

1. **Scholarship.** A cumulative grade index of 3.00 (B average) must be earned at the University of Northern Iowa in all courses attempted as a graduate student. No credit toward graduation is allowed for a course in which the grade earned is below C, and

courses in which the grade earned is below C are not applicable in meeting graduation requirements or in satisfying specific course requirements.

2. **Recency of Credit.** Courses taken more than seven (7) years prior to the granting of the degree cannot be used to meet degree requirements.
3. **Transfer Credit.** Usually a maximum of twelve semester hours of graduate credit from other accredited institutions may be applied toward meeting minimum credit hour requirements for the Doctor of Industrial Technology degree, subject to the Recency of Credit regulation. Credit may not be transferred if taken four (4) years prior to application for admission to the Doctor of Industrial Technology degree program. The student's faculty advisory committee will make recommendations regarding the applicability of transfer credit.
4. **Residence Credit.** The student must be enrolled in continuous, full-time study for one academic year plus the preceding or following summer session. Full-time study is considered to be a minimum of twelve (12) semester hours of credit during a semester and six (6) semester hours of credit during a summer session. Persons serving as graduate assistants in the department will be considered full time if they carry at least nine (9) semester hours per semester in addition to the assistantship. Once a student's dissertation proposal has been approved, active registration must be maintained (at least one semester hour) during each succeeding semester and summer session.
5. **Maximum Academic Load.** The maximum graduate student load during each semester of the academic year is fifteen (15) hours; that permitted during the eight-week summer session is eight (8) hours; that during the two-week post session, two (2) hours. Persons employed full time should not register for more than six (6) hours of graduate credit in any semester.
6. **Level of Courses.** At least 38 semester hours for meeting minimum credit hour requirements for the Doctor of Industrial Technology degree must be in 200- or 300-level coursework. All 100(g) series courses available in the Department of Industrial Technology require activities beyond those required for undergraduate students; and some courses at both the 100(g) and 200 level require activities for doctoral students beyond those required of predoctoral students.
7. **Examinations.** The following examinations are required of all students working toward the Doctor of Industrial Technology degree:
 - a. **Graduate Record Examinations.** Students applying for admission to the DIT degree program must forward, with their applications, their scores on the verbal and quantitative sections of the Graduate Record Examination. A combined minimum total score of 1000 on the verbal and quantitative sections of this examination with a minimum of 400 for each section is required for *degree status* admission.
 - b. **Departmental Candidacy Examination.** The Departmental Candidacy Examination for the DIT degree program is termed the Personal Career Development Plan. It is based on the candidate's career goal and it will define the planned program of study. It will also serve as a basis for self evaluation, faculty advisement and for the pursuant completion of the candidate's degree program. The content of the Personal Career Development Plan is a statement of the candidate's career goals; a compilation of the competencies and other skills already possessed along with supporting evidence; and, a proposed plan of study to achieve the remaining career goal competencies. The Personal Career Development Plan

requires both a written component and an oral interview. The Personal Career Development Plan must be completed early in the first or second semester or summer session in residence. The candidate consults with the chairperson of the advisory committee in the development of the Personal Career Development Plan which requires approval by the candidate's faculty advisory committee.

- c. **Comprehensive Examinations.** Both oral and written comprehensive examinations are required for the DIT degree program. Comprehensive examinations are prepared and evaluated by the student's faculty advisory committee. Students should consult with their advisers about the appropriate time to apply to take the comprehensive examinations.
- d. **Dissertation Examination.** An oral examination is required over the content and methodology used in conducting the research associated with the student's dissertation. The examination is conducted by the student's faculty advisory committee after the dissertation has been presented to the faculty advisory committee in final form.
8. **Publication.** Before being allowed to submit a dissertation proposal the student must submit for publication at least one (1) scholarly paper to a periodical, journal, or textbook within one of the professional fields related to industrial technology. The faculty advisory committee shall determine when this requirement is met. Publication completed prior to admission to the program may be submitted for consideration.
9. **Dissertation.** A minimum of three (3) final copies of the accepted dissertation are required to be delivered to the office of the Graduate Dean no later than two (2) weeks before graduation. The original and two copies of the dissertation must be on 16 pound (minimum weight), 100 percent rag-content, white paper; erasable paper is not acceptable.
10. **Abstracts of Dissertation.** Three (3) copies of an abstract of the dissertation must be filed in the Graduate College office at the time of final deposit of the dissertation. Regulations for the dissertation also apply to the abstract. The abstract must not exceed 400 words in length. Please see the *Thesis Manual* for details.
11. **Microfilm Agreement.** A "Microfilm Agreement" and "Survey of Earned Doctorates" must be completed and returned to the Graduate College office with the final dissertation. The University of Northern Iowa participates in a program sponsored by the Association of Research Libraries and conducted by University Microfilms, Ann Arbor, Mich., for reproduction of doctoral dissertations on microfilm. If the dissertation has been copyrighted, this information must be included on the University Microfilm agreement form.
12. **Dissertation Fees.** Several fees are required in connection with the dissertation; these include:
 - a. A binding fee for the library and department copies of the dissertation. If a student wishes to bind additional copies, individual arrangements with a binder must be made.
 - b. A microfilm fee to cover the cost of microfilming the dissertation and publishing the abstract.
 - c. A copyright fee if the student wishes to have the dissertation copyrighted.

Students should check with the Graduate College office or the current *Thesis Manual* for the amount of each of the above fees.

The binding, microfilming, and copyrighting fees must be paid at the UNI Business Office and a copy of the receipt submit-

ted to the Graduate College office at the time the final copy of the dissertation is deposited.

Graduation Requirements

The following requirements for graduation apply to all students on the Doctor of Industrial Technology degree program.

1. **Credit Hour Requirements.** A minimum of sixty-four (64) semester hours of credit must be completed beyond the master's degree. At least fifty-two (52) hours of these credits must be earned at the University of Northern Iowa. At least thirty-eight (38) of the credit hours used for meeting minimum credit hour requirements for the degree must be in the 200- or 300-level coursework.
2. **Research Requirements.** A dissertation is required of all candidates. Research credit of twelve (12) semester hours will be granted for the successful completion of the dissertation. All dissertation research credit is recorded as *Research Continued (RC)* until the faculty advisory committee has conducted the final oral examination over the dissertation and given final approval for the dissertation.
3. **Filing of Dissertations.** The dissertation must be submitted in final form to the faculty advisory committee at least seven (7) weeks prior to graduation. Regulations governing the preparation of dissertations may be obtained from the office of the Dean of the Graduate College.
4. **Application for Graduation.** The candidate for the Doctor of Industrial Technology degree must make application for graduation not later than the ninth week of the semester or the fourth week of the summer session in which the student plans to receive the degree. The application form may be secured in the office of the Registrar. Applications received after the dates designated will be placed with those for the following session.
5. **Attendance at Commencement.** The candidate for the Doctor of Industrial Technology degree is expected to secure the appropriate academic regalia and appear at commencement for the awarding of the degree.

Program Requirements: Doctor of Industrial Technology

It is the student's responsibility to be familiar with all degree program requirements and take the initiative in meeting established guidelines. This specific information may be obtained from the Coordinator of Graduate Studies in the Department of Industrial Technology.

Required Core Program

- a) Industrial Technology Foundations —
 - 33:375 Historical Developments in Industrial Technology — 3 hrs.
 - 33:376 Contemporary and Future Developments in Industrial Technology — 3 hrs.
 - 33:377 Readings in Technology and Society — 3 hrs.
- b) Seminars —
 - 33:282 Seminar in Industrial Technology — 4 hrs.
(Students must enroll in a 1-semester hour seminar during each summer session and semester while meeting residence requirements.)

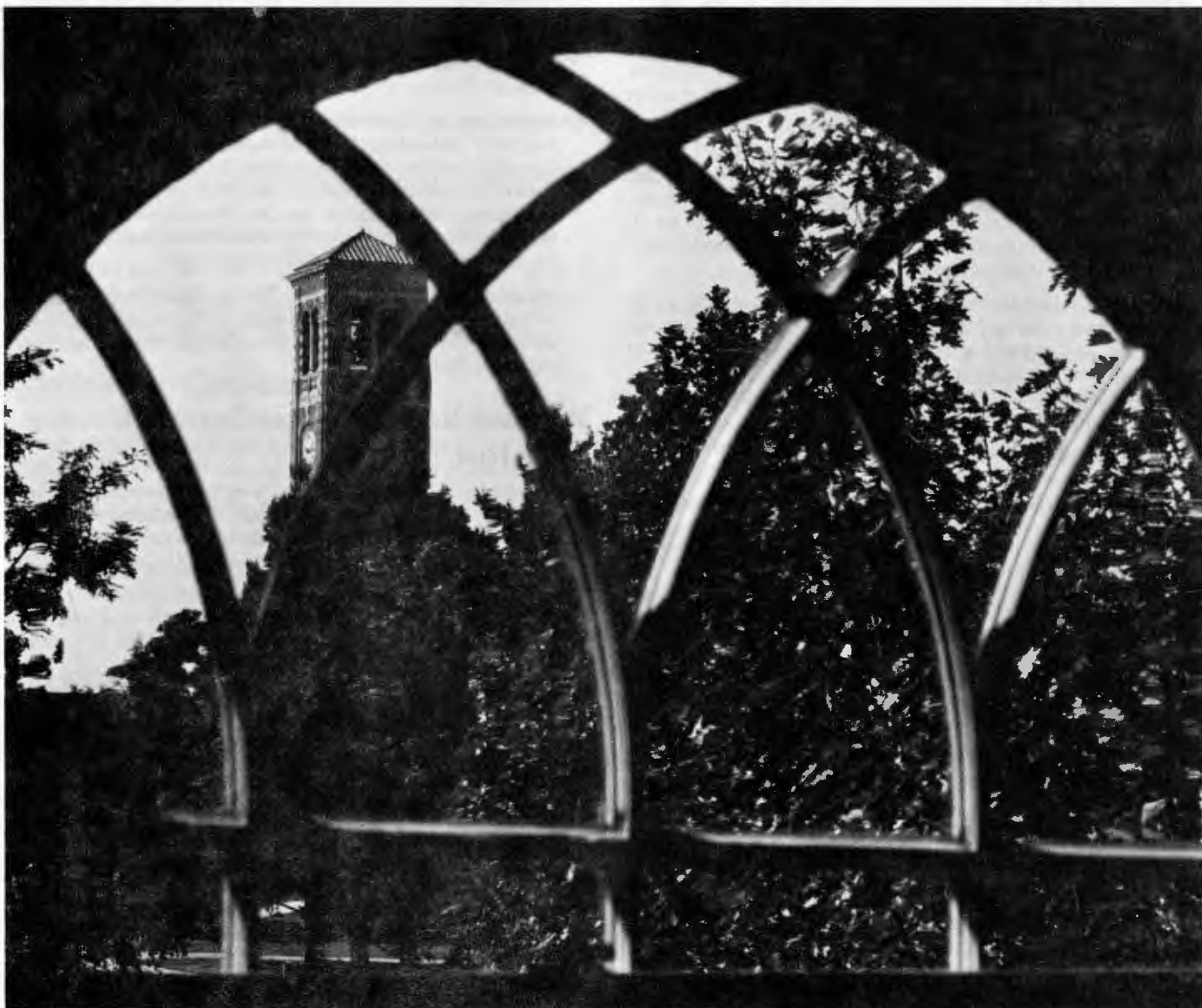
- c) Research, Statistical Methods, and Computer Programming —
33:292 Research Methods in Industrial Technology — 3 hrs.
25:180 Statistical Methods in Education and Psychology — 3 hrs.
81:101 Fundamentals of Computer Programming — 3 hrs.
- d) Internship —
33:388 Internship in Industrial Technology — 6 hrs.
- e) Dissertation —
33:399 Research — 12 hrs.

Supporting Coursework

Supporting coursework may be taken from any discipline in the university as long as it relates to the career goals and competencies identified on the program of study and is approved by the student's faculty advisory committee. A minimum of eight (8) semester hours (beyond the 6 hours of required core courses) of supporting coursework must be taken outside the Department of Industrial Technology.

Cooperative Doctoral Program in Educational Administration

An agreement has been worked out between the University of Northern Iowa and the University of Iowa to provide for transfer of graduate credit earned at the University of Northern Iowa at the sixth-year level to apply on the Doctoral Program in Educational Administration at the University of Iowa (U of I). A student may transfer any time during the sixth year. If a student completes the Specialist in Education program at UNI, it would be possible for an eligible candidate to complete the requirements for the Doctor of Philosophy degree at the U of I in three semesters (two semesters must be consecutive) of full-time residence work. The Office of the Dean of the Graduate College will provide further details upon request.



State Board of Regents

Officers of the Board:

S.J. Brownlee, President
Emmetsburg
R. Wayne Richey, Executive Secretary
Des Moines

Members of the Board:

Terms expire June 1985	S.J. Brownlee, Emmetsburg Ann Jorgensen, Garrison Arthur A. Neu, Carroll
Terms expire June 1987	Peg Anderson, Bettendorf John McDonald, Dallas Center June Murphy, Des Moines
Terms expire June 1989	Charles Duchon, Des Moines Percy G. Harris, Cedar Rapids Timothy Neville, Red Oak

Administrative Staff

1983 - 1984

Officers of Administration

Constantine W. Curriss — B.A., University of Kentucky; M.A., University of Illinois; Ed.D., University of Kentucky
President of the University — 1983**

James G. Martin — B.A., M.A., Indiana State College; Ph.D., Indiana University
Vice-President and Provost
Professor of Sociology — 1971

Thomas W. Hansmeier — B.A., M.A., University of Northern Iowa; Ed.D., Michigan State University
Vice-President for Educational and Student Services
Professor of Education — 1971

John E. Conner — B.S., University of Illinois; M.A., Western Illinois University
Vice-President for Administration and Finance — 1984

Edward V. Voldseth — B.A., University of Montana; M.A., Teachers College, Columbia University; Ph.D., University of Iowa
Assistant to the President for State Relations and Special Events — 1964 (1977)

Division of Instruction

Division Administration

James G. Martin — B.A., M.A., Indiana State College; Ph.D., Indiana University
Vice-President and Provost
Professor of Sociology — 1971

Fred W. Lott — B.S., Cedarville College, Ohio; M.A., Ph.D., University of Michigan
Assistant Vice-President, Academic Affairs
Professor of Mathematics — 1949 (1971)

Charles L. Means — B.S., Southern Illinois University; M.A., Webster College; Ph.D., St. Louis University
Assistant Vice President for Academic Affairs for EOP/SCS
Adjunct Associate Professor of Education — 1983

Fred D. Carver — B.A., Aurora college; M.S., Ph.D., University of Wisconsin-Madison
Dean of the College of Education
Professor of School Administration — 1981

Thomas H. Thompson — B.A., M.A., Ph.D., University of Iowa
Acting Dean of the College of Humanities and Fine Arts
Professor of Philosophy — 1952 (1981)

Clifford G. McCollum — B.S., M.A., Ed.D., University of Missouri
Dean of the College of Natural Sciences
Professor of Biology — 1949 (1968)

Robert E. Morin — B.S., M.S., Northwestern University; Ph.D., University of Wisconsin
Dean of the College of Social and Behavioral Sciences
Director of the Center for Business and Behavioral Research
Professor of Psychology — 1972

Robert J. Waller, Jr. — B.A., M.A., University of Northern Iowa; D.B.A., Indiana University
Dean of the School of Business
Professor of Management — 1968 (1980)

John C. Downey — B.S., M.S., University of Utah; Ph.D., University of California, Davis
Dean of the Graduate College
Professor of Biology — 1968 (1981)

Glenn L. Hansen — B.A., M.A., University of Northern Iowa; Ph.D., Texas A & M University
Dean, Division of Continuing Education and Special Programs
Associate Professor of Business Education — 1964 (1982)

Donald O. Rod — B.A., Luther College; A.B.L.S., University of Michigan
Director of Library Services
Professor of Library Science — 1953 (1966)

**A single date following the title indicates the beginning of service at this university. If two dates are given, the first indicates the incumbent's first appointment to a position and the second (in parentheses) the beginning of service in present capacity.

Academic Computing Services

James L. Wolf — B.S., M.S., University of Dayton
Director, Academic Computing Services and UNI Census Data Center —
1974 (1977)

Kenneth Connelly — B.A., University of Northern Iowa
Programmer/Analyst — 1983

Steven Y. Moon — B.A., University of Northern Iowa; M.S., University of
Iowa
Systems Analyst — 1979

Diane Sullivan — B.A., University of Northern Iowa
Programmer/Analyst — 1980

Terry A. Ward
Programmer/Analyst — 1981

Broadcasting Services

Douglas L. Vernier — B.A., M.A., University of Michigan
Director of Broadcasting Services
Assistant Professor of Radio-Television — 1972

Jennifer Rugg Alt — B.A., University of Northern Iowa; M.A., University of
Iowa
Producer/Announcer — 1979

Carol Y. Cooper — B.S., East Texas State University
Minority Affairs Producer — 1980

Julie Englander — B.A., University of Iowa
Producer/Announcer — 1982

Peter S. Hamlin — B.A., Middlebury College
Senior Producer, Fine Arts — 1980

Mark J. Heistad — B.A., Luther College
Producer/Announcer — 1980

Wayne Neil Jarvis — B.A., University of Northern Iowa
News and Public Affairs Producer — 1973

Carl R. Jenkins — B.A., M.A., University of Northern Iowa
Assistant Director of Broadcasting Services — 1962 (1976)

Shelton L. Jones — B.F.A., California Institute of the Arts
Senior Producer — 1983

Philip Nusbaum — B.A., City College of New York; M.A., Ph.D., Indiana
University
Producer/Announcer — 1977

Jons Conrad Olsson — B.A., Thiel College, Pennsylvania
Assistant Director of Broadcasting, Development — 1978

Educational Media Center

Robert R. Hardman — B.S.Ed., Maryland State Teacher's College; M.S.,
Ed.D., Indiana University
Director of the Educational Media Center
Professor of Educational Media — 1970 (1974)

Douglas E. Crowell — B.A., University of Northern Iowa
Television Producer/Director — 1982

Lynn Dykstra — B.S., Creighton University; M.A., Ed.S., University of Iowa
Operations Manager/Adjunct Professor — 1983

Terry D. Goro — B.A., M.S., Southern Illinois University
Coordinator of Graphic and Photographic Services/Assistant Professor —
1983

Nancy A. Hinshaw — B.A., M.A., University of Northern Iowa
Coordinator of Slide and Multi-Image Services
Adjunct Instructor of Educational Media — 1978

Emrys L. Pugh — Television Electronics, DeVry Institute, Chicago, Illinois
Senior Television Engineer — 1979

Dennis B. Reimer — B.A., M.A., University of Northern Iowa
Television Producer/Director — 1973 (1978)

Duane R. Semler — B.S., Iowa State University; M.S., University of
Northern Iowa
Manager, Media Laboratories — 1978

Continuing Education and Special Programs

Individual Studies — Conferences and Institutes

Virginia Hash — B.S., Iowa State University; M.A., Ed.S., University of
Northern Iowa; Ph.D., Iowa State University
Associate Dean, University Continuing Education and Special Programs
Associate Professor of Education — 1966 (1983)

Nancy Bramhall — B.A., University of Northern Iowa
Coordinator of Individual Studies — 1980 (1981)

Thomas Michalski — B.S.S., M.S., Fordham College; M.Ed., Ph.D., State
University of New York at Buffalo
Coordinator of Conferences and Institutes — 1983

Department of Military Science

Roger W. Lawson, Lt. Col. — B.S., University of Iowa; M.A., University of
Missouri
Head of Department of Military Science
Professor of Military Science — 1983

Keith M. Anderson, Major — B.A., University of South Dakota; M.A.,
Webster College
Professor of Military Science — 1981

Bernard A. Fox, Capt. — B.A., Lake Superior State College
Instructor of Military Science — 1982

Douglas R. Kangas, Sgt. — B.B.A., Campbell University, North Carolina
Administrative Noncommissioned Officer — 1982

John H. Reagan, Master Sgt.
Senior Instructor — 1981

Museum

John Eiklor — B.A., University of Wichita; M.A., Ph.D., Northwestern
University
Acting Director, Museum
Professor of History — 1963 (1982)

Educational Opportunity Programs and Special Community Services

JoAnn Anderson

Program Assistant, Early Childhood Communications Laboratory, UNI-CUE
— 1979

DeDe Brame — B.A., Rosary College
Advisor/Counselor, On-Campus Educational Opportunity Program — 1980

Karen McNeil — B.S., Lincoln University, Missouri; M.A., University of
Northern Iowa
Program Assistant, Early Childhood Communications Laboratory, UNI-CUE
— 1980

Inez Murtha — B.A., University of Northern Iowa
Assistant Director, UNI-CUE — 1980 (1982)

Anthony Stevens — B.A., Wartburg College
Assistant Director for On-Campus Educational Opportunity Program —
1972 (1973)

Ira Tolbert — B.A., Huston-Tillotson College; M.S., State University of New
York at Albany
Coordinator, Graduate Educational Opportunity Program — 1976 (1977)

Juanita Wright — B.A., University of Northern Iowa
Adviser/Counselor, On-Campus Educational Opportunity Program — 1975

Joe W. Young — B.A., Wartburg College; M.S.W., University of Iowa
Adviser/Counselor, On-Campus Educational Opportunity Program

Graduate College

Ruth E. Ratliff — B.A., St. Olaf College; M.A., University of Iowa
Assistant to the Dean for Faculty and Grants Services — 1976 (1980)

Ira Tolbert — B.A., Huston-Tillotson College; M.S., State University of New York at Albany
Assistant to the Dean for Student Services — 1976 (1980)

University Library

Judy A. Hansen — B.S., Iowa State University
Library Associate, Circulation — 1973

Coyle E. McCann — B.S., University of Northern Iowa
Library Associate, Circulation — 1964

Timothy E. Pieper — B.S., University of Northern Iowa
Library Associate, Circulation — 1975

June S. Stageberg — Ed. B., University of Hawaii; M.A., Columbia University; M.A., University of Northern Iowa
Library Associate, Cataloging — 1973

Della Taylor — B.A., University of Northern Iowa
Library Associate, Acquisitions — 1956

Elizabeth Vetter
Library Associate, Reader Service — 1967

Sandra Warner — B.A., Western Illinois University
Library Associate, Acquisitions — 1981

College of Education

Curriculum Laboratory

Cynthia R. Cummings — B.A., University of Northern Iowa
Materials Coordinator — 1971 (1976)

Day Care Center

Sharyl L. Ritschel — B.A., Northeastern State College; M.Ed., University of Illinois
Coordinator, Day Care Center — 1981 (1983)

Kay R. Drum — B.A., University of Northern Iowa; M.A., University of Iowa
Assistant to the Coordinator, Day Care Center — 1981

School of Health, Physical Education, and Recreation

C. David Burton — B.S., Fort Hays State University; M.A., University of Northern Iowa
Head Athletic Trainer — 1977 (1978)

Timothy H. Klatt — B.A., Central College; M.A., University of Northern Iowa
Assistant to Intramural Sports Director — 1983

Terry Noonan — B.A., Loras College; M.A., Eastern Kentucky University
Assistant Athletic Trainer/Instructor — 1983

Brenda Sneed — B.A., Missouri Southern State University; M.A., University of Northern Iowa
Assistant Athletic Trainer/Instructor — 1983

Department of Special Education

Harriet A. Healy — B.S., The College of St. Catherine; M.A.E., Ed.S., University of Northern Iowa
Administrator, Northern Iowa Instructional Laboratory — 1973 (1977)

Department of Teaching

Susan Flemr — R.N., Northwestern University; R.S.N., Wittenberg University
School Nurse, Malcolm Price Laboratory School — 1979

College of Humanities and Fine Arts

Gallery of Art

Daniel Stetson — B.A., Potsdam College of Arts and Sciences, New York; M.F.A., Syracuse University
Gallery Director, Department of Art — 1981

Department of Communication and Theatre Arts

Shan Ayers — B.S., School of the Ozarks; M.A., Central Missouri State University
Theatre Technician — 1981

Dennis Bole — B.S., Iowa State University; M.F.A., University of Iowa
Promotion Coordinator/Theatre Business Manager — 1981

Department of Modern Languages

Janice M. Hanish — B.A., M.A., University of Northern Iowa
Administrative Assistant — 1977

School of Music

Robert Byrnes — B.A., M.A., University of Northern Iowa
Adjunct Instructor of Choral Music
Administrative Assistant
University Carillonneur — 1974 (1981)

College of Natural Sciences

Department of Biology

Ron D. Camarata
Biology Greenhouse and Preserves Manager — 1968

School of Business

Geoffrey T. Mills — B.A., M.S., Ph.D., University of Illinois
Assistant Dean and Coordinator of Graduate Programs
Assistant Professor of Management — 1983

Karen S. Nantz — B.A., M.A.E., University of Northern Iowa
Coordinator of School of Business Programs — 1971 (1981)

Office of the President

Doris Lee Miller — B.A., University of Northern Iowa
Administrative Assistant — 1949 (1965)

Marilyn D. S. Monteiro — B.A., University of Massachusetts; Ed.M., Ed.D., Harvard University
Affirmative Action Officer — 1983

Richard H. Stinchfield — B.A., Colby College; M.A., University of Maine, Orono; Ph.D., University of Idaho; M.B.A., Murray State College
Director, Planning and Policy Management — 1983

Division of Educational and Student Services

Division Administration

Thomas W. Hansmeier — B.A., M.A., University of Northern Iowa; Ed.D., Michigan State University
Vice-President for Educational and Student Services
Professor of Education — 1971

Thomas P. Romanin — B.S., M.A., Kent State University; Ph.D., St. Louis University
Associate Vice-President for Educational and Student Services — 1976 (1980)

Academic Advising Services

Janice F. Abel — B.M.E., M.M.E., Drake University; Ed.D., Indiana University

Coordinator of Academic Advising Services — 1972

Reginald John Green — B.A., Luther College; M.A., University of Northern Iowa

Assistant Coordinator of Academic Advising and Coordinator of Testing Services — 1974 (1977)

Jean Neibauer — B.A., Mercy College of Detroit; M.A., University of Northern Iowa

Academic Adviser — 1983

Office of Admissions

Jack L. Wielenga — B.A., M.A., Ed.S., University of Northern Iowa

Director of Admissions — 1959 (1972)

Mark W. Fullbright — B.A., University of Northern Iowa; M.A., University of West Florida

Admissions Counselor — 1983

Lynne A. Green — B.A., University of Northern Iowa

Admissions Counselor — 1983

Dennis L. Hendrickson — B.A., M.A., University of Northern Iowa

Associate Director of Admissions — 1971 (1974)

Noreen M. Hermansen — B.S., Oklahoma College of Liberal Arts; M.A.,

University of Northern Iowa

Associate Director of Admissions — 1968 (1978)

Julia M. Nelson — B.A., University of Northern Iowa

Admissions — Financial Aids Representative — 1983

Germana P. Nijim — B.A., College of St. Catherine; M.A., University of Rhode Island

Foreign Student Adviser — 1970 (1978)

Donald G. Scoles — B.A., University of Northern Iowa; M.A., Harding

University; Doctor of Arts, Middle Tennessee State University

Assistant Director of Admissions-Transfer Relations — 1983

Counseling, Placement, and Career Services

Larry R. Routh — B.A., Kearney State College; M.S., Ph.D., University of Kansas

Director of Counseling, Placement and Career Services — 1979

Joyce E. Alberts — B.A., M.A., University of Northern Iowa

Counselor — Counseling Center — 1968

Evelyn D. Barron — B.A., Iowa State University; M.A., University of Northern Iowa

Business Placement and Co-op Coordinator — 1976 (1982)

Patricia A. Bassett — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa

Liberal Arts Placement Director — 1979

Sherry D. Candee — B.A., M.A., University of Iowa

Career Information Specialist — Career Center — 1977 (1979)

JoAnn C. Cummings — B.A., M.A., University of Northern Colorado

Counselor and Coordinator: Counseling Program for Adult Students — 1963 (1972)

Martin E. Edwards — B.S., M.A., Central Michigan University; Ph.D., North Texas State University

Counselor/Psychologist — Counseling Center — 1973

Kenneth E. Jacobsen — B.A., Dana College; M.C., Arizona State University

Career Services Coordinator — Career Center — 1979

Allan J. Stamberg — B.S., Western Michigan University; M.A., Appalachian State University

Cooperative Education Director — 1976 (1980)

Larry M. Steinhauser — B.S., Towson State University; M.S., Ph.D., Southern Illinois University

Counselor/Handicapped Student Services Coordinator — 1983

Norman L. Story — B.A., David Lipscomb College; M.A., Western Michigan University; Ph.D., California School of Professional Psychology

Clinical Psychologist, Counseling Center Director — 1968 (1981)

Donald D. Wood — B.A., M.A., University of Northern Iowa

Education Placement Director — 1980 (1981)

Financial Aids and Student Employment Office

Yancy Beavers — B.A., M.A., New Mexico Highlands University

Acting Director of Financial Aids — 1975 (1982)

Judith O. Decker — B.A., University of Northern Iowa

Assistant to the Director, Financial Aids — 1979

Pete Sidwell — B.B.A., University of Iowa

Assistant Director of Financial Aids — 1977 (1978)

Brian S. Will — B.A., University of Northern Iowa

Financial Aids Counselor — 1982 (1983)

Learning Skills Center

Wayne A. King — B.A., State University of New York at Plattsburgh; M.A., Ph.D., University of Michigan

Director of the Learning Skills Center

Adjunct Assistant Professor of Education — 1978 (1983)

Janice Dursky — B.A., M.A., University of Iowa

Reading Specialist — 1983

Anne C. Johnstone — B.A., Pennsylvania State University; M.A., St.

Bonaventure University

Writing Specialist — 1983

Penny J. Yeneriz-Beebe — B.A., State University of New York at Geneseo; M.F.A., Cornell University

Writing Specialist — 1981

Maucker University Union

John F. Ketter — B.S., George Williams College; M.A., The Ohio State University

Director of Maucker Union/Student Activities — 1967 (1974)

James A. Dittrich — B.A., Winona State University; M.A., M.S., Mankato State University

Assistant Director — Student Activities — 1982

Gregory R. Hambleton — B.A., Western Kentucky University; M.F.A., University of Iowa

Technical and Operations Director — 1980

Carolyn J. Seymour — B.S., M.A., The Ohio State University

Assistant Director — Programs — 1980

Office of the Registrar

Robert D. Leahy — B.S., Valparaiso University, Indiana; M.A., University of Iowa

Registrar — 1976 (1978)

Mary E. Engen

Associate Registrar, Scheduling — 1967 (1979)

Philip L. Patton — B.A., M.A., University of Northern Iowa

Associate Registrar, Systems — 1972 (1978)

Residence System

Clark K. Elmer — B.A., University of Michigan; M.A., Michigan State University

Director of Residence — 1972 (1980)

Patricia C. Adkins — A.B., M.A., Western Kentucky University

Hall Coordinator — 1982

James F. Conneely — B.A., St. Bonaventure University; M.S., Alfred University

Hall Coordinator — 1982

Gary C. Daters — B.A., University of Northern Iowa
Residence System Business Manager — 1973 (1978)

Norbert W. Dunkel — B.S., M.S., Southern Illinois University, Carbondale
Hall Coordinator — 1981

Margaret J. Empie — B.S., University of Wisconsin, Stout
Assistant Food Unit Manager — 1980

Jane B. Fero — B.A., M.A., Bowling Green State University; Specialist
Certificate, University of Akron, Ohio
Manager, Family Housing — 1983

Elise A. Frohn
Assistant Food Unit Manager — 1963 (1982)

Rebecca J. Gandt — B.A., M.A., Northeast Missouri State
Hall Coordinator — 1983

Daniel John Gleissner — B.S., University of Wisconsin, Stevens Point;
M.A., Ball State University
Assistant Director of Residence/Facilities — 1980

Virginia S. Goodall — B.A., University of Northern Iowa
Assistant Food Unit Manager — 1982

Robert A. Hartman — B.S., M.A., Ball State University
Associate Director of Residence/Housing — 1977 (1980)

Gayle A. Hodgson — B.S., Iowa State University
Administrative Dietitian — 1965

Merle V. Huber — A.A.S., Iowa State University
Food Unit Manager — 1976

Susan Jorgensen — B.A., University of Northern Iowa
Assistant Food Unit Manager — 1982

Jane Juhl Juchems — B.S., Iowa State University
Food Unit Manager — 1979

Julaine R. Kiehn — B.S., M.S., Iowa State University
Food Unit Manager — 1981

Janice L. Kurtovich — B.S., M.S., Eastern Illinois University
Hall Coordinator — 1981

Dorothy M. Lomen — B.S., Iowa State University
Assistant Food Unit Manager — 1982

Mark Allen McGuire — B.A., University of Northern Iowa; M.S., Southern
Illinois University at Carbondale
Hall Coordinator — 1981

Drake E. Martin — B.J., University of Texas, Austin; M.A., Bowling Green
State University
Coordinator of Residence Hall Programs — 1981

Ramona K. Milius — B.A., University of Northern Iowa
Food Unit Manager — 1980

Sonya Denise Neely — B.A., University of North Carolina; M.A., Marshall
University
Hall Coordinator — 1981

Jennifer Olson — B.S., North Dakota State University
Assistant Food Unit Manager — 1983

Donna L. Polc — B.A., University of Wisconsin, Milwaukee; M.A., Michigan
State University
Hall Coordinator — 1983

Brenda E. Price — B.A., University of Northern Iowa
Assistant Food Unit Manager — 1983

Kent Ruby — B.S., Northwest Missouri State University
Focus Coordinator — 1967 (1980)

Nancy A. Voelz — B.S., M.S., University of Wisconsin, Madison
Hall Coordinator — 1981

John S. Zahari — B.A., Michigan State University
Associate Director of Residence/Dining Service — 1965 (1980)

Student Health Services

Kenneth W. Caldwell — B.S., Iowa Wesleyan, Mount Pleasant; M.D., State
University of Iowa
Director of Student Health Services — 1977

Phyllis A. Bolte — R.N., Broadlawns School of Nursing, Des Moines, Iowa
Staff Nurse — 1973

Karla J. Fegley — B.S., Drake University
Pharmacist — 1982

Bruce E. Forystek — B.A., St. Cloud State University; M.D., University of
Minneapolis
Staff Physician — 1982

Eileen T. Jirak — R.N., Mercy School of Nursing, Dubuque, Iowa
Staff Nurse — 1977

Caryl L. Nielsen — R.N. Allen Lutheran School of Nursing, Waterloo, Iowa
Staff Nurse — 1973

Patricia A. Peterson — R.N. Allen Lutheran School of Nursing, Waterloo,
Iowa
Staff Nurse — 1978

Paul D. Tenney — D.O. College of Osteopathy Medicine and Surgery, Des
Moines, Iowa
Staff Physician — 1971 (1976)

Robert L. Tujetsch — B.S.C., M.H.A., State University of Iowa; M.A.,
University of Northern Iowa
Administrator, Student Health Services — 1976

Joan A. Wageman — L.P.N., Rochester School of Practical Nursing; B.A.,
University of Northern Iowa
Health Aide Coordinator — 1982

Office of Student Research

Paul C. Kelso — B.A., B.S.Ed., Northeast Missouri State University; M.Ed.,
Ed.D., University of Missouri, Columbia
Coordinator of Student Research — 1948 (1978)

Division of Administrative Services

Division Administration

John E. Conner — B.S., University of Illinois; M.A., Western Illinois
University
Vice-President for Administration and Finance — 1984

Donald R. Walton — B.A., Saint Ambrose College; M.A., University of
Northern Iowa
Assistant Vice-President for Personnel Relations — 1966 (1979)

Gerald D. Bisbey — B.A., University of Northern Iowa; M.S., Iowa State
University; Ph.D., University of Iowa
Administrative Research Assistant — 1964

Administrative Data Processing

L. Dale Hilliard — B.S.E.E., University of Iowa; M.S., Oklahoma State
University
Director, Management Data Processing Services — 1979

David C. Fanter — B.S., Augustana College
Student Information Systems Coordinator/Data Base Administrator — 1978
(1981)

Jon J. Fouts — B.A., Central College
Programmer Analyst — 1982

Roberta L. Fox — B.A., University of Northern Iowa
Systems Analyst — 1976 (1983)

Helen Freese — A.A.S., Kirkwood Community College
Programmer Analyst — 1981

Angela G. Johnson — B.A., University of Northern Iowa
Programmer Analyst — 1983

Marcia A. Kruse — B.S., Iowa State University
Programmer Analyst — 1983

Dennis R. Lindner — B.A., Wartburg College
Auxiliary Information Systems Coordinator — 1978 (1981)

Thomas C. Peterson — B.S., Iowa State University
Associate Director — 1982

Kevin Quarnstrom — B.A., University of Northern Iowa
Systems Analyst — 1979

Lyle A. Rasmussen — B.S., Iowa State University
Financial Information Systems Coordinator — 1978 (1981)

Carl Frederick Schick, Jr. — B.S., Iowa State University
Systems Programmer — 1981

Romeyn Beth Sloan — B.S., University of Iowa
Senior Programmer Analyst — 1980 (1983)

Merlin D. Taylor — B.A., University of Northern Iowa
Assistant Director/Operations — 1966 (1967)

Daniel L. Whitmore — A.A.S., Indian Hills Community College
Programmer Analyst — 1982

Alumni Services and Development

L.M. "Lee" Miller — B.A., University of Northern Iowa
Director of Alumni Services and Development — 1971 (1977)

William D. Calhoun, Jr. — B.A. Hiram College, Ohio; M.A., University of Northern Iowa
Assistant Director for Development — 1981

W. Harold Hunter — B.A., Maryville College, Tennessee; M.A., University of Tennessee; M.Div., Princeton University
Assistant Director for Planned Giving — 1982

Ellen Stettler Leslie — B.A., University of Northern Iowa
Assistant Director for Alumni Services — 1976 (1981)

Budget Administration

James A. Stampp — B.B.A., Kent State University; M.B.A., State University of New York at Buffalo
Budget Administrator — 1976

Eunice A. Dell — B.A., M.B.A., University of Northern Iowa
Budget/Research Analyst — 1977

Business Services

Richard S. Douglas — A.B., J.D., Duke University, Ed.S., Rutgers
University Graduate School of Education
Director of Business Services — 1976 (1979)

James L. Bailey — B.A., M.A., University of Minnesota
Associate Director of Business Services and University Treasurer — 1950 (1977)

Donald R. Boss
Chief Purchasing Agent — 1964

Roxanne Conrad
Purchasing Assistant — 1968 (1976)

Ann L. George
Assistant Payroll Coordinator — 1974 (1979)

George M. Hansen — B.A. DePauw University
Payroll Coordinator — 1977

Ray G. Harris
Administrative Assistant — 1979

Bruce A. Rieks — B.A., University of Northern Iowa
Senior Accountant — 1979

Barton G. Sheffer — B.S., University of Wisconsin
Accounts Receivable Coordinator — 1979

Gary B. Shontz — B.B.A., University of Iowa; M.A.E., Ed.S., University of Northern Iowa
Controller/University Secretary — 1974 (1976)

Intercollegiate Athletics and UNI-Dome Administration

Robert A. Bowlsby — B.S., Morehead State University; M.A., University of Iowa
Athletic Director — 1981 (1984)

Jerome Lee Albert — B.A., Wartburg College; M.S., Winona State University
Assistant Football Coach — 1982

Terry Allen — B.A., University of Northern Iowa
Assistant Football Coach — 1980

James D. Anderson — B.S., M.S., Eastern Illinois University
Baseball Coach
Women's Head Basketball Coach
Assistant Professor of Physical Education — 1965 (1981)

James L. Berry — B.A., Creighton University; M.A., University of Northern Iowa
Men's Head Basketball Coach — 1973 (1979)

Janice M. Bittner — B.S., Valparaiso University; M.S., Illinois State University
Assistant Volleyball Coach — 1982

Russel A. Bloom — B.S., University of Wisconsin, LaCrosse
Ticket Manager — 1981

Donald B. Briggs — B.S., University of Iowa; M.A., University of Northern Iowa
Wrestling Coach — 1975 (1982)

Gene Bruhn — D. of Chiropractic, Palmer School of Chiropractic
Assistant Softball Coach — 1982

Christopher Bucknam — B.S., Norwich University, Northfield, Vermont
Assistant Track Coach — 1979

C. David Burton — B.A., Fort Hays State University; M.A., University of Northern Iowa
Head Athletic Trainer — 1978

Wallace H. Chambers — B.A., B.S., Eastern Kentucky University
Assistant Football Coach — 1983

Terry Craft — B.S., Iowa State University
Assistant Women's Basketball Coach — 1981

Annabel G. Hill
Athletics Business Manager — 1967 (1978)

James E. Husbands — B.A. Wake Forest University
Assistant to the Athletic Director — Marketing — 1981

John A. Jermier — B.A., Coe College; M.A., University of Iowa
Associate Athletic Director — 1980

Nancy A. Ross Justis — B.A., University of Iowa
Sports Information Director — 1974 (1979)

Robert Kincaid — B.A., Adams State College, Colorado
Assistant Football Coach — 1983

A. Walter Klinker — B.A., University of Colorado
Assistant Football Coach — 1983

Michael L. Kolling — B.S., South Dakota State University; M.S., North Dakota State University
Assistant Football Coach — 1977

James M. Miller — B.A., University of Northern Iowa
Assistant Wrestling Coach — 1983

Keith Mourlam — B.A., University of Iowa
Assistant Wrestling Coach — 1982

Darrell Mudra — B.S., Peru State College; M.S., University of Nebraska-Omaha; Ed.D., University of Northern Colorado
Head Football Coach — 1983

Terrance G. Noonan — M.S., Eastern Kentucky University
Assistant Athletic Trainer — 1983

Dennis L. Remmert — B.A., M.A., University of Northern Iowa
Assistant Football Coach
Assistant Professor of Physical Education — 1964 (1969)

Brenda M. Sneed — B.S., Missouri Southern State College
Assistant Athletic Trainer — 1981 (1983)

Roger W. Sommerlot — B.S., Iowa State University
Assistant Football Coach — 1982 (1983)

Paul D. Swanson — B.S., Iowa State University; M.A., Northwestern University
Assistant Men's Basketball Coach — 1982

Daniel G. Traeger — B.S., Illinois State University; M.A., Roosevelt University
Men's Assistant Basketball Coach — 1981

Sandra C. Williamson — B.S., M.S., Eastern New Mexico University; Ed.D., University of Northern Colorado
Associate Athletic Director — 1978

Personnel Services

John D. Mixsell, Jr. — B.S., Saint Lawrence University, New York; M.A., Webster College, Missouri
Personnel Director — 1979

Loren T. Allen — B.S., Iowa State University; M.A., University of Iowa
Benefits Coordinator — 1982

Allan J. Nimmer — B.A., Western State College, Colorado; M.A., University of Northern Iowa
Personnel Generalist — 1982

Judy S. Thielen — B.A., University of Northern Iowa
Employment Operations Coordinator — 1979 (1981)

Physical Plant Administration

Thomas E. Paulson — B.S.C.E., University of North Dakota; B.S.B.A., University of Minnesota; M.B.A., University of Northern Iowa
Assistant Vice-President for Facilities — 1974 (1980)

Engineering Services

David L. Walter — B.S., Iowa State University
Engineering Services Director — 1977

Berwyn Johnson — B.S.M.E., Iowa State University
Mechanical Engineer/Energy Manager — 1974

J. Greg Kizevic — B.A., University of Illinois
Assistant Construction Architect — 1982

Morris Mikkelsen — B. Architecture, B.S., M.S., Iowa State University
Architect — 1983

Thomas J. Richtsmeier — B.S.M.F., Iowa State University
Assistant Mechanical Engineer — 1982

Facilities Planning, Space Assignment, and Safety

Leland A. Thomson — B.A., M.A., University of Northern Iowa; Ed.D., University of Denver
Facilities Planning, Space Assignment, and Safety Director — 1968 (1981)

Mark W. Seely — B.A., Auburn University
Architect/Planner — 1981

Parking and Security

Rollin G. Evers
Parking and Security Director — 1964 (1981)

John D. Stalberger
Parking and Security Assistant Director — 1965 (1981)

Plant Services

Daryl E. Stoner
Maintenance and Operations Director — 1979 (1981)

Duane Anders — B.A., University of Northern Iowa
Assistant Director, Maintenance and Operations — 1982

Mark D. Baethke — B.A., University of Northern Iowa
Manager, Facilities Automation and Data Recording — 1980 (1982)

Charles H. Billman
Manager, Grounds Services — 1946 (1980)

Merlyn L. Heidt
Manager, Greenhouse/Landscaping — 1975

Glenn E. Holmes
Manager, Power Plant Services — 1953 (1980)

Arthur C. Johnson — A.A.S., Milwaukee School of Engineering
Manager, Electrical Services — 1967 (1981)

Donald C. Luchtenburg
Manager, Mechanical Services — 1959 (1978)

Kenneth L. Nieman
Manager, Campus Services — 1964 (1974)

Robert V. Piper
Manager, Transportation Services — 1952 (1980)

Roger Uhlenhopp
Manager, Carpentry/Key/Paint Services — 1975 (1976)

Office of Public Information Services

Donald A. Kelly — B.A., M.A., University of Iowa
Director of Public Information Services — 1964 (1971)

Laura L. Amick — B.A., University of Iowa
News Writer — 1982

Kevin J. Boatright — B.A., Nebraska Wesleyan University; M.A., University of Iowa
Assistant Publications Administrator — 1979

Susan Metz Chilcott — B.A., Midland Lutheran College, Nebraska; M.A., Creighton University
University Publications Administrator — 1976

Vicki Sue Grimes — B.A., University of Iowa
Assistant Director of Public Information Services
News Director — 1970 (1972)

Elizabeth Conrad LaVelle — B.A., Lawrence University, Wisconsin; M.A., Western Michigan University
Publications Designer — 1977 (1979)

Debbie Blake Lenius — B.A., University of Northern Iowa
Assistant Publications Administrator — 1983

Cindy L. Wilson — B.A., Marshall University, West Virginia
News Writer — 1982

Special Services

Donald D. Greene — B.A., University of Northern Iowa
Special Services Administrator — 1975 (1978)

Emeritus Faculty

George G. Ball — B.S., M.A., Kent State University; Ed.D., University of Wyoming
Professor of Education and Psychology — 1958 (1978)

Russell N. Baum — B.Mus., M.Mus., Eastman School of Music, University of Rochester
Professor of Piano — 1938 (1981)

Randall R. Bebb — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Teaching
Coordinator of Student Teaching — 1947 (1981)

Paul F. Bender — B.A., University of Iowa; M.A., Columbia University; Ed.D., New York University
Dean of Students — 1921 (1964)

Harold E. Bernhard — B.A., Carthage College, Illinois; B.D., Chicago Lutheran Theological Seminary; Ph.D., University of Chicago
Director of the Bureau of Religious Activities
Professor of Religion — 1949 (1974)

Clifford L. Bishop — B.A., Western College of Colorado; M.A., University of Denver; Ed.D., University of Colorado
Professor of Education and Psychology
Head of the Department of Education — 1950 (1977)

Mildred E. Blackman — B.S., Northwest Missouri State College; M.Ed., University of Missouri
Assistant Professor of Teaching — 1948 (1977)

Mary E. Blanford — B.A., Central Normal College, Indiana; M.S., Indiana University
Assistant Professor of Business Education and Administrative Management — 1961 (1982)

Robert Paul Brimm — B.Ed., Southern Illinois University; M.Ed., Ed.D., University of Missouri
Professor of Education — 1948 (1982)

David R. Bluhm — B.A., Princeton University; B.Th., Princeton Theological Seminary; M.A., Ph.D., University of Pittsburgh
Professor of Philosophy and Religion — 1954 (1977)

E. Jean Bontz — B.A., M.A., Ph.D., University of Iowa
Professor of Physical Education for Women
Head of the Department of Physical Education for Women — 1949 (1972)

Emily Clara Brown — A.B., Ohio State University; M.A. in Ed., Arizona State University; Ph.D., University of Arizona
Professor of History — 1966 (1976)

Lena P. Buckingham — B.S., Northeast Missouri State Teachers College; M.S., Iowa State University
Associate Professor of Home Economics — 1953 (1968)

Marjorie D. Campbell — B.Sc.Ed., M.A., Ohio State University
Associate Professor of Art — 1949 (1979)

Henri L. Chabert — Lic. en Droit, Institut des Sciences Politiques; Bar ex (Paris); Lic es Lettres, Competitive exam du C.A. (Sorbonne) and of the U.N.; Doctorat de l'Université de Paris (Sorbonne)
Professor of French — 1961 (1983)

Walter Barton Coleman — B.A., Swarthmore College; M.Mus., University of Texas; D.M.A., Eastman School of Music, University of Rochester
Associate Professor of Flute and Cello — 1953 (1974)

John Paul Cowley — B.A., Heidelberg College, Ohio; M.A., University of Wichita; Ph.D., Yale University
Professor of English — 1945 (1973)

Elinor Ann Crawford — B.A., M.A., University of California, Berkeley; Ph.D., University of Oregon
Professor of Physical Education for Women
Head of the Department of Physical Education for Women — 1949 (1979)

Leonard R. Davis — B.A., Coe College; M.S., University of Iowa
Counselor (Counseling Psychologist), Counseling Center — 1964 (1976)

David D. Delafield — B.F.A., M.A., Ph.D., Ohio State University
Professor of Art — 1951 (1982)

E.C. Denny — B.A., Indiana University; M.A., University of Chicago; Ph.D., University of Iowa
Professor of Education and Head of the Department — 1923 (1955)

Gordon B. Denton — B.B.A., University of Texas; M.B.A., University of Iowa
Associate Professor of Marketing — 1965 (1980)

Margaret Divelbess — B.A., Grinnell College; M.A., Columbia University
Associate Professor of Teaching — 1927 (1964)

Mary K. Eakin — B.A., Drake University; B.L.B., M.A., University of Chicago
Associate Professor of Education — 1958 (1980)

Charlotte E. Eilers — B.A., M.A., University of Northern Iowa
Assistant Professor of Speech — 1965 (1979)

Merrill F. Fink — B.A., Central Michigan University; M.S., University of Michigan
Registrar — 1946 (1978)

Louise C.T. Forest — B.A., M.A., Bryn Mawr College; Ph.D., Yale University
Professor of English — 1948 (1983)

Earnest C. Fossum — B.A., Augustana College, South Dakota; M.A., Ph.D., University of Iowa
Associate Professor of Speech
Director of the Placement Bureau — 1943 (1973)

V.D. French — B.S., Drake University; M.D., Rush Medical College
Director, Student Health Service — 1952 (1955)

Laura K. Gilloley — B.S., M.A., University of Minnesota
Associate Professor of Teaching — 1950 (1971)

Lewis E. Glenn — L.L.B., George Washington University
Associate Registrar, Scheduling — 1966 (1979)

Walter J. Gohman — B.A., St. Cloud State College, Minnesota; M.A., University of Minnesota
Associate Professor of Teaching: Science — 1951 (1977)

Harry G. Guillaume — B.S., M.A., Ed.D., Columbia University
Professor of Art
Head of the Department of Art — (1948-1970) — 1948 (1981)

Elbert W. Hamilton — B.A. Tarko College; M.A. Ph.D., University of Iowa
Professor of Mathematics
Head of the Department of Mathematics (1963-1976) — 1949 (1978)

Nellie D. Hampton — B.S., Central Missouri State University; M.A., State University of Iowa; Ph.D., University of Wisconsin
Professor of Education — 1945 (1981)

Alden B. Hanson — B.A., St. Olaf College; M.Ph., University of Wisconsin
Associate Professor of English
Foreign Student Adviser — 1946 (1975)

Rose L. Hanson — B.S., University of Nebraska; M.A., University of Iowa
Assistant Professor of Teaching — 1920 (1956)

William P. Happ, Jr. — B.S., Northwestern University; M.S., Ph.D., University of Iowa
Professor of Teaching — 1948 (1974)

Leta Norris Harmon — B.S., Central State College, Oklahoma; M.Ed., University of Oklahoma
Associate Professor of Teaching
Coordinator of Student Teaching — 1950 (1975)

Bernice Helff — B.A., University of Iowa; M.A., Columbia University
Associate Professor of Teaching — 1942 (1972)

S.C. Henn — B.A., Colorado College; M.S., University of Chicago; M.D., Rush Medical College
Director, Student Health Service, and Staff Physician — 1958 (1971)

- Clifford H. Herrold** — B.A., Central State University, Oklahoma; M.A., Colorado State University; Ed.D., Stanford University
Professor of Art — 1947 (1978)
- Olive J. Holliday** — B.A., University of Northern Iowa; M.A., University of Illinois
Associate Professor of Home Economics — 1949 (1974)
- Telford F. Hollman** — Ph.B., J.D., University of Chicago; L.L.M., John Marshall Law School; M.B.A., DePaul University
Professor of Business Law — 1968 (1973)
- Mavis L. Holmes** — B.A., M.A., Ph.D., Northwestern University
Dean of Students — 1958 (1973)
- Donald F. Howard** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of History
Dean of the College of Business and Behavioral Sciences — (1968-1972) — 1947 (1977)
- Esther M. Hult** — B.Ed., Wisconsin State University, Superior, M.Ph., Ph.D., University of Wisconsin
Professor of Education — 1943 (1972)
- Ruth Hutcheson** — B.A., Nebraska State Teachers College, Peru; M.A., Colorado State College
Assistant Professor of Teaching — 1953 (1976)
- Phillip C. Jennings** — B.S., M.S., Iowa State University
University Business Manager — 1942 (1977)
- Leonard J. Keefe** — B.Ed., Illinois State University; M.A., Northern Colorado University
Professor of Marketing
Head of the Department of Business — (1969-1972) — 1956 (1979)
- James W. Kercheval** — B.A., University of Northern Iowa; M.S., Ph.D., University of Iowa
Professor of Chemistry — 1949 (1972)
- Howard T. Knutson** — B.A., Luther College; M.A.Ed., University of Wyoming
Professor of Education
Director of Teacher Education
Dean of the College of Education — (1968-1976) — 1953 (1981)
- Dorothy Mae Koehring** — B.A., Kansas State University; M.A., Columbia University; Ph.D., Yale University
Professor of Education
Regional Training Program Officer (Director) for Project Head Start — 1933 (1973)
- William C. Lang** — B.A., Yankton College; M.A., Ph.D., University of Iowa
Professor of History
(Director of Teacher Education — 1959-1968)
Dean of Instruction and Dean of the College, Vice-President of the College, Vice-President of the University, Vice-President for Academic Affairs — (1959-1970) — 1949 (1978)
- Agnes Lebeda** — B.A., Northwestern Oklahoma State University; M.S., Oklahoma State University; Ph.D., University of Minnesota
Professor of Management — 1953 (1981)
- William Ernest Luck** — B.S., M.S., Stout State University; Ed.D., Oklahoma State University
Professor of Industrial Technology — 1962 (1979)
- G. Douglas McDonald** — B.S., University of Pennsylvania; M.S., University of Minnesota
Assistant Professor of Marketing — 1963 (1973)
- Keith F. McKean** — A.B., Williams College; M.A., University of Chicago; Ph.D., University of Michigan
Professor of English
Head of the Department of English Language and Literature — (1968-1972) — 1968 (1981)
- Edna L. Mantor** — B.A., University of Iowa; M.A., Columbia University
Associate Professor of Teaching — 1923 (1968)
- William O. Maricle** — B.Ed., University of Southern Illinois; M.A., University of Illinois; Ed.D., University of Colorado
Associate Professor of Teaching
Coordinator of Student Teaching — 1949 (1981)
- Frank E. Martindale** — B.Ed., Wisconsin State University, Stevens Point; M.Ph., Ph.D., University of Wisconsin
Professor of Education
Head of Department of Curriculum and Instruction — 1948 (1972)
- Charles D. Matheson** — B.Mus., M.Mus., University of Michigan
Professor of Voice — 1955 (1982)
- Jvone A. Maxwell** — B.A., University of Northern Iowa; M.Mus., American Conservatory of Music
Associate Professor of Piano — 1940 (1978)
- Caryl A. Middleton** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Teaching
Coordinator of Student Teaching — 1949 (1981)
- Dorothy L. Moon** — B.Ed., Northern Illinois University; M.A., Northwestern University
Associate Professor of Physical Education for Women — 1946 (1977)
- Evelyn J. Mullins** — B.A., Grinnell College, B.S.L.S., Columbia University
Order Librarian — 1930 (1971)
- Jeannette Rogers Potter Peterson** — B.A., University of Northern Iowa; M.S., University of Wisconsin; Ed.D., University of Oregon
Professor of Physical Education for Women — 1955 (1975)
- George R. Poage** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of History — 1954 (1982)
- Williard J. Poppy** — B.Ed., Wisconsin State University, Oshkosh; M.S., Ph.D., University of Iowa
Professor of Physics — 1949 (1975)
- Albert A. Potter** — B.A., Nebraska State Teachers College; M.A., University of Iowa
Associate Professor of Teaching: Science — 1946 (1978)
- Joseph Przychodzin** — E.D., Southern Illinois University; M.A., University of Illinois; Ed.D., University of Missouri
Professor of Education — 1947 (1981)
- Howard O. Reed** — B.S., Bradley University; M.A., Northwestern University; M.Ed., Ed.D., University of Illinois
Professor of Industrial Arts
Head of the Department of Industrial Arts and Technology — 1954 (1971)
- H. Willard Reninger** — B.A., M.A., Ph.D., University of Michigan
Professor of English
Head of the Department of English Language and Literature — 1939 (1968)
- Betts Ann Roth** — B.S., George Peabody College for Teachers; M.A., Columbia University
Associate Professor of Teaching; Early Childhood Education — 1951 (1976)
- Myron E. Russell** — B.Mus., Kansas State University; M.Mus., Eastman School of Music, University of Rochester; Ph.D., University of Michigan
Professor of Woodwind Instruments
Head of the Department of Music — 1929 (1973)
- Arlene A. Ruthenberg** — B.A., University of Northern Iowa; M.E., Wayne State University
Youth Collection Librarian and Assistant Professor — 1968 (1980)
- Leland L. Sage** — B.A., Vanderbilt University; M.A., Ph.D., University of Illinois
Professor of History — 1932 (1967)
- Pauline Louise Sauer** — B.Ed., Chicago Teachers College; M.A., University of Michigan; Ph.D., Cornell University
Associate Professor of Biology
Director of the UNI Museum — 1949 (1981)

Raymond J. Schlicher — B.A., Iowa Wesleyan College; M.A., Ph.D., University of Iowa
Dean of the Division of Extension and Continuing Education — 1949 (1980)

N. Marshall Schools — B.S., Mary Washington College; M.A., George Peabody College for Teachers
Associate Professor of Teaching: Physical Education — 1949 (1976)

Ruth Sevy — B.S., Central Missouri State University; M.A., University of Northern Colorado
Associate Professor of Health, Physical Education and Recreation: Health — 1967 (1980)

Edna Anderson Shores — B.S., M.A., Teachers College of Columbia University
Assistant Professor of Home Economics — 1973

Herbert M. Silvey — B.S., Central Missouri State College; M.A., Ed.D., University of Missouri
Director of the Bureau of Research and Examination Services — 1947 (1974)

Ina Mae Brown Silvey — B.S. in Ed., Central Missouri State College; M.A., University of Northern Iowa
Associate Professor of Mathematics — 1954 (1978)

Ernestine L. Smith — B.A., M.S., University of Michigan
Professor of Geography — 1936 (1973)

Francis E. Smith — B.A., University of Massachusetts; M.A., Ph.D., University of Iowa
Professor of English — 1950 (1979)

Eloise P. Soy — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education — 1965 (1979)

Julia L. Sparrow — B.S., St. Cloud State College; M.A., Ph.D., University of Iowa
Professor of Education — 1944 (1975)

Norman C. Stageberg — B.S., University of Minnesota; M.A., University of Iowa; Ph.D., University of Wisconsin
Professor of English — 1946 (1973)

Myrtle M. Stone — B.A., Washington State University; M.B.A., University of Washington; Ed.D., New York University
Professor of Teaching — 1928 (1966)

Marguerite May Struble — B.A., M.A., Ph.D., University of Iowa
Professor of Teaching — 1924 (1969)

Nathan M. Talbott — B.A., Western Michigan University; M.A., University of Michigan; Ph.D., University of Washington
Professor of Political Science and East Asian Studies — 1956 (1982)

Loren F. Taylor — B.A., M.A., University of Iowa
Assistant Professor of English — 1954 (1979)

M.R. Thompson — B.A., Western Union College; M.A., Ph.D., University of Iowa
Professor of Economics
Head, Department of Social Science — 1921 (1955)

Wayne Palmer Truesdell — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Education — 1967 (1977)

Guy W. Wagner — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor and Director of the Educational Media Center — 1941 (1970)

Lillian R. Wagner — B.A., University of South Dakota; M.A., University of Iowa; Ph.D., University of Wisconsin
Professor of Speech — 1950 (1978)

Willis H. Wagner — B.S., Central Missouri State University; M.A., University of Missouri
Professor of Industrial Technology — 1945 (1982)

Leland L. Wilson — B.S., Eastern Kentucky State University; M.S., University of Kentucky; Ph.D., George Peabody College for Teachers
Professor of Chemistry
Head of the Department of Chemistry — (1968-1975) — 1955 (1979)

Leonard P. Winier — B.S., Winona State College; M.A., Ed.D., Columbia University
Professor of Biology — 1949 (1977)

Emily Josephine Yeager — B.S., Louisiana State University; M.S., University of Colorado
Assistant Professor of Home Economics — 1954 (1968)

Instructional Staff

1983-1984

Constantine W. Curris — B.A., University of Kentucky; M.A., University of Illinois; Ed.D., University of Kentucky
President of the University — 1983

James G. Martin — B.A., M.A., Indiana State College; Ph.D., Indiana University
Vice-President and Provost
Professor of Sociology — 1971

Faculty

Fred J. Abraham — B.S., M.S., University of Wisconsin; M.A., Ph.D., University of Oregon
Associate Professor of Economics — 1973 (1978)

Ronald J. Abraham — B.B.A., M.B.A., University of Wisconsin, C.P.A.
Assistant Professor of Accounting — 1974

Charles M. Adelman — A.B., Brooklyn College; Ph.D., University of Chicago; Ph.D., University of Gothenburg, Sweden
Assistant Professor of Art — 1983

Iradge Ahrabi-Fard — B.A., M.A., University of Northern Iowa; Ph.D., University of Minnesota
Associate Professor of HPER: Physical Education — 1972 (1976)

Howard Aibel — B.S., M.S., Julliard School of Music
Associate Professor of Piano — 1978

Lyle K. Alberts — B.A., M.A., University of Northern Iowa
Assistant Professor of Political Science and Social Science — 1964 (1967)

James E. Albrecht — B.A., M.A., Ed.S., University of Northern Iowa; Ed.D., Indiana University
Professor of Education — 1965 (1973)

John F. Aldrich — B.S., University of Rhode Island; M.Ed., Boston University
Associate Professor of Teaching: Physical Education — 1955 (1970)

Mary Nan Koen Aldridge — B.S., M.S., Texas College of Arts and Industries; Ed.S., University of Northern Iowa; Ph.D., Iowa State University
Associate Professor of Education — 1967 (1981)

Edward W. Amend — B.A., Midland Lutheran College; M.Div., S.T.M., Lutheran School of Theology, Chicago; Ph.D., University of Chicago
Associate Professor of Religion and Humanities — 1967 (1972)

B. Wylie Anderson — B.A., M.A., University of Northern Colorado; M.A., University of Denver; Ph.D., University of Iowa
Professor of Economics
Head of the Department of Economics — 1966 (1976)

Hale Anderson — B.A., M.A., University of Iowa; M.F.A., Tyler School of Art, Temple University
Assistant Professor of Art — 1978

Keith M. Anderson, Major — B.A., University of South Dakota; M.A., Webster College
Assistant Professor of Military Science — 1981

Ronald J. Anderson — B.A., M.A.T., Augustana College, South Dakota; Ph.D., University of North Carolina, Chapel Hill
Assistant Professor of Special Education — 1980

Ruth B. Anderson — B.A., University of California, Berkeley; M.S.W., Columbia University School of Social Work
Associate Professor of Social Work — 1969 (1973)

Wayne I. Anderson — B.A., M.S., Ph.D., University of Iowa
Professor of Geology
Head of the Department of Earth Science — 1963 (1972)

LaVerne W. Andreessen — B.S., M.A., University of Northern Iowa; C.P.A.
Assistant Professor of Accounting — 1980

Abdelraouf A. Arafa — B.N.E., Alexandria University; M.M.E., Doctor of Mechanical Engineering, Stuttgart University
Assistant Professor of Industrial Technology — 1983

***Donald LeRoy Ashbaugh** — B.A., University of Northern Iowa; M.S., University of Oregon
Lecturer in Management — 1980

C. Murray Austin — B.A., M.A., Ph.D., University of Pennsylvania
Associate Professor of Geography and Regional Science — 1973

Meredith L. Bakley — B.S., Black Hills State College; M.Ed., Colorado State University
Instructor in HPER: Physical Education — 1978

Francisco X. Barrios — A.B., St. Louis University, Mo.; M.A., Ph.D., University of Cincinnati
Assistant Professor of Psychology — 1979 (1983)

Thomas M. Barry — B.M.Ed., M.M., University of Colorado
Assistant Professor of Oboe and Saxophone — 1973 (1976)

Clemens Bartollas — B.A., Davis and Elkins College; B.D., Princeton Theological Seminary; S.T.M., San Francisco Theological Seminary; Ph.S., Ohio State University
Associate Professor of Sociology — 1981

Jackson N. Baty — B.A., Stanford University; M.A., Ed.S., University of Northern Iowa; Ed.D., Drake University
Assistant Professor of Education — 1971 (1974)

Kenneth E. Baughman — B.A., Lawrence University; M.A., Ph.D., University of Chicago
Assistant Professor of English — 1972

Diane L.S. Baum — B.A., M.A., University of Northern Iowa
Assistant Professor of Mathematics — 1964 (1968)

Walter E. Beck — B.M.E., Knox College; M.A., Ph.D., University of Illinois
Assistant Professor of Computer Science — 1980

Caryl R. Becker — B.M.Ed., Oberlin Conservatory of Music; M.M., New England Conservatory of Music
Assistant Professor of Voice — 1969 (1973)

James Edward Becker — B.A., Cornell College; M.A., University of Paris (Sorbonne)
Assistant Professor of Teaching: Foreign Language — 1970

***Judy Markham Beckman** — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Language Arts — 1969 (1975)

Mary Green Beckman — B.Mus., Oberlin Conservatory of Music; M.M., Cleveland Institute of Music
Professor Harp and Theory — 1947 (1977)

Thomas R. Berg — B.S., M.A., Ph.D., Ohio State University
Associate Professor of Education — 1972 (1980)

Barton Lee Bergquist — B.A., North Park College, Chicago; M.A., Northeastern Illinois University; Ph.D., University of Kansas
Assistant Professor of Biology — 1978

William M. Bernardo — B.A., Wartburg College; M.B.A., Arizona State University
Instructor in Management — 1981 (1982)

John E. Bernthall — B.A., Wayne State College; M.A., Kansas University; Ph.D., University of Wisconsin
Professor of Speech Pathology
Head of the Department of Communicative Disorders — 1979 (1982)

Maribelle O. Betterton — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education — 1973 (1976)

M. Roger Betts — B.A., University of Northern Iowa. M.A.E., Ball State University; Ed.D., Arizona State University
Assistant Professor of Industrial Technology — 1975

*on leave

Hugo L. Beykirch — B.A., M.A., Ph.D., Wayne State University
Associate Professor of Audiology — 1974 (1979)

Lynne P. Beykirch — B.A., M.A., University of Northern Iowa
Instructor of Home Economics — 1983

***Steven E. Bigler** — B.A., M.F.A., University of Minnesota
Associate Professor of Art — 1978 (1980)

Richard Bigus — B.A., University of California; M.F.A., Yale University
Assistant Professor of Art — 1983

Debela Birru — B.S., M.B.A., Northwest Missouri State
Instructor in Management — 1983

Jeffrey J. Blaga — B.S., M.A., Ph.D., Ohio State University
Associate Professor of Teaching: Social Studies — 1978 (1983)

Emil W. Bock — B.Mus., M.Mus., Northwestern University; Ph.D.,
University of Iowa
Professor of Music History — 1939 (1961)

James Bodensteiner — B.A., Loras College; M.A., Ed.S., University of
Northern Iowa
Adjunct Instructor and Coordinator of Credit Programs — 1980 (1983)

Carl W. Bollwinkel — B.S., Concordia Teachers College; M.S., Ph.D.,
Southern Illinois University
Associate Professor of Teaching: Science — 1980

Brian L. Book — B.Mus., M., Mus., North Texas State University
Instructor of Low Brass — 1983

Paula Reigh Boothby — B.A., Kalamazoo College; M.A., Western Michigan
University; Ed.D., University of North Dakota
Associate Professor of Teaching: Elementary Education — 1978 (1983)

Myra R. Boots — B.A., Grinnell College; M.A., University of Northern Iowa
Assistant Professor of Speech Pathology — 1965 (1969)

Mary K. Bozik — B.A., University of Wisconsin; M.A., Bradley University;
Ph.D., University of Illinois, Urbana-Champaign
Assistant Professor Communication Studies — 1982

Lynn A. Brant — B.S., M.S., D.Ed., The Pennsylvania State University
Assistant Professor of Geology — 1982

E. Clifford Brennen — B.A., San Francisco State University; M.S.W.,
D.S.W., University of California, Berkeley
Professor of Social Work
Head of the Department of Social Work — 1983

Dianna L. Briggs — B.A., M.A., University of Northern Iowa
Adjunct Instructor in Teaching: Business Education — 1978

***Douglas E. Brintnall** — B.A., University of Iowa; M.A., Union Theological
Seminary; Ph.D., Columbia University
Associate Professor of Anthropology — 1974 (1979)

Ronald D. Bro — B.A., M.A., University of Northern Iowa; Ed.D.,
University of Nebraska
Professor of Industrial Technology — 1967 (1975)

Earle G. Brooks — B.S., University of Wisconsin, Madison
Instructor in Marketing — 1983

Rhoda K. Brooks — B.S., University of Wisconsin; M.A., University of
Minnesota
Assistant Professor of Teaching: Special Education — 1983

Leander A. Brown — B.A., Fisk University; M.A., Roosevelt University;
Ph.D., Iowa State University
Assistant Professor of Education
Assistant Professor of Teaching: Counseling — 1970

John Edward Bruha — B.S., University of Wisconsin, Stevens Point; M.S.,
University of Wisconsin, Madison
Assistant Professor of Mathematics — 1959 (1965)

Reinhold K. Bubser — B.A., Western Michigan University; M.A., Ph.D.,
Michigan State University
Assistant Professor of German — 1982

James L. Burrow — B.A., M.A., University of Northern Iowa; Ph.D.,
University of Nebraska, Lincoln
Associate Professor of Marketing — 1980 (1983)

Fred C. Burton — B.F.A., Wichita State University; M.A., Kent State
University; M.F.A., Wichita State University
Assistant Professor of Art — 1983

Kenneth G. Butzier — B.A., University of Northern Iowa; M.S., University
of Wisconsin
Associate Professor of Teaching: Speech and Drama — 1960 (1973)

— **Daniel J. Cahill** — B.S., M.A., Loyola University; Ph.D., University of Iowa
Professor of English — 1968 (1972)

David C. Calhoon — B.Mus., University of Wisconsin, Madison; M.Mus.,
Yale University
Instructor of High Brass — 1983

Lisa A. Callahan — B.S., M.A., Ph.D., Ohio State University
Assistant Professor of Sociology — 1983

William P. Callahan II — B.A., University of South Florida; M.A.T., Rollins
College; Ed.D., University of Florida
Associate Professor of Special Education — 1979 (1983)

Russel B. Campbell — Sc.B., Sc.M., Brown University; M.S., Ph.D.,
Stanford University
Assistant Professor of Mathematics — 1983

Gaile S. Cannella — B.S., M.A., Tennessee Technological University; Ed.D.,
University of Georgia
Assistant Professor of Education — 1981

Phyllis Scott Carlin — B.S.E., Northeast Missouri State University; M.S.,
Ph.D., Southern Illinois University
Associate Professor of Interpretation — 1976 (1982)

Thomas Carlisle — B.A., Thomas More College; M.F.A., Ohio University
Associate Professor of Theatre — 1977 (1983)

Fred D. Carver — B.A., Aurora College; M.S., Ph.D., University of
Wisconsin, Madison
Professor of School Administration
Dean of the College of Education — 1981

Rodger D. Caspers — B.S., Illinois State University
Adjunct Instructor of Child Drama — 1983

Barbara Cassino — B.F.A., M.F.A., University of Michigan
Associate Professor of Art — 1978 (1982)

G. Scott Cawelti — B.A., M.A., University of Northern Iowa; Ph.D.,
University of Iowa
Assistant Professor of English — 1968 (1973)

James G. Chadney — B.S., Portland State University; M.A., Ph.D.,
Michigan State University
Associate Professor of Anthropology — 1968 (1978)

James C. Chang — B.S., Mount Union College, Ohio; Ph.D., University of
California, Los Angeles
Professor of Chemistry — 1964 (1974)

Hsi-Ling Cheng — B.Law., National Chengchi University; M.A., Columbia
University
Assistant Professor of History — 1966

Bruce Alan Chidester — B. Mus., Augustana College, Illinois; M.Mus.,
Northern Illinois University
Assistant Professor of Trumpet — 1969 (1972)

- C. David Christensen** — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education — 1974 (1978)
- Roy Chung** — B.A., M.A., University of Wisconsin, Madison
Associate Professor of Geography and Demography — 1958 (1973)
- Robert E. Clark** — B.A., Oklahoma State University; M.A., University of Oklahoma; Ph.D., University of Nebraska
Assistant Professor of Geography — 1965
- Robert E. Claus** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Sociology — 1959 (1970)
- Bernard L. Clausen** — B.A., Colgate University; M.A., University of Michigan
Associate Professor of Biology — 1959 (1970)
- Dennis E. Clayson** — B.S., Ph.D., Brigham Young University
Assistant Professor of Marketing — 1982
- Carol Colburn** — B.A., Western Washington University; M.A. University of Minnesota
Assistant Professor of Theatre — 1981
- Richard Colburn** — B.A. Western Washington University, M.F.A., University of Minnesota
Assistant Professor of Art — 1981 (1982)
- John R. Cole** — B.A., Columbia University; M.A., University of Illinois, Urbana; Ph.D., Columbia University
Assistant Professor of Anthropology — 1980
- Phyllis Bowman Conklin** — B.A., Carson-Newman College, Tennessee; M.S., Ohio University; Ph.D., University of Tennessee
Assistant Professor of Home Economics — 1968
- R. Forrest Conklin** — Howard Payne College; M.A., Baylor University; Ph.D., Ohio University
Professor of Communication Studies — 1968 (1975)
- Timothy M. Cooney** — B.S., Lockhaven State College; M.S., Elmira College; Ed.D., University of Northern Colorado
Associate Professor of Teaching: Science — 1977 (1982)
- Carol Ann Cooper** — B.S., Oregon State University; M.S., Smith College; Ed.D., University of North Carolina, Greensboro
Associate Professor of Physical Education — 1974 (1981)
- Jeffrey S. Copeland** — B.S., University of Missouri, Columbia; M.A., Arkansas State University; Ph.D., University of Missouri, Columbia
Assistant Professor of English — 1981
- Steven B. Corbin** — B.A., University of Northern Iowa; M.Ed., Colorado State University; Ed.D., Virginia Polytechnic Institute and State University
Associate Professor of Marketing
Acting Head of the Department of Marketing — 1975 (1981)
- Lee E. Courtneage** — B.A., Nebraska State Teachers College; M.A., Colorado State College; Ed.D., University of Northern Colorado
Professor of Special Education — 1968 (1971)
- Graeme M. Cowen** — B.S.Ed., Pennsylvania State University; M.Mus., D.Mus., Indiana University
Associate Professor of Choral Music — 1976 (1983)
- John S. Cross** — B.S., M.S., University of Illinois, Urbana
Assistant Professor of Mathematics — 1963
- David R. Crownfield** — A.B., Harvard College; B.D., Yale University; Th.M., Th.D., Harvard University
Professor of Religion and Philosophy
Acting Head of the Department of Philosophy and Religion — 1964 (1981)
- Dennis Craig Cryer** — B.A., M.A., University of Northern Iowa; Ph.D., University of Utah
Assistant Professor of Health Education — 1976
- Donald G. Cummings** — B.A., Coe College; Ph.D., Tulane University
Assistant Professor of Economics — 1963
- Barbara J. Darling** — B.A., University of Northern Iowa; M.A., University of Northern Colorado
Associate Professor of Physical Education — 1958 (1975)
- Donald R. Darrow** — B.A., M.A., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of Teaching: Industrial Technology — 1973 (1981)
- Nadene A. Davidson** — B.A., M.A., University of Northern Iowa
Instructor in Teaching: Home Economics — 1981
- Darrel W. Davis** — B.A., M.A., University of Northern Iowa; Ph.D., Oklahoma State University; C.P.A.
Associate Professor of Accounting — 1969 (1977)
- Thomas Martin Davis** — B.A., Central Washington University; M.A., H.S.D., Indiana University
Assistant Professor of Health Education
Coordinator, Health Education Division — 1979
- George F. Day** — B.A., Dartmouth College; M.A.T., Harvard University; Ph.D., University of Colorado
Professor of English — 1967 (1978)
- Charles Van Loan Dedrick** — B.A., Brown University; M.A.T., Rollins College; M.Ed., Ed.D., University of Florida
Associate Professor of Education — 1971 (1979)
- Bernard C. DeHoff** — B.A., Franklin and Marshall College; M.A., Indiana University
Associate Professor of English — 1955 (1969)
- Walter E. DeKock** — B.A., Central College; M.A., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of Science Education — 1964 (1973)
- Kenneth J. DeNault** — B.S., Stanford University; M.S., University of Wyoming; Ph.D., Stanford University
Associate Professor of Geology — 1973 (1980)
- E.A. Dennis** — B.A., M.A., University of Northern Colorado; Ed.D., Texas A & M University
Professor of Industrial Technology — 1973
- Joan Englund Diamond** — B.A., Knox College; M.S., University of Illinois
Associate Professor of Teaching: Educational Media — 1957 (1973)
- Saul L. Diamond** — B.S., Syracuse University; M.B.A., Wharton School of Business, University of Pennsylvania
Assistant Professor of Marketing and Small Business Institute Director — 1967
- Ernest K. Dishner** — B.S., M.A., East Tennessee State University; Ed.D., University of Georgia
Professor of Education
Associate Dean — 1979 (1982)
- Douglas D. Doerzman** — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching
Coordinator of Student Teaching — 1967 (1970)
- Forrest A. Dolgener** — B.S., M.Ed., Ph.D., University of Texas, Austin
Associate Professor of Physical Education — 1979
- Susann Gael Doody** — B.S., Northern Illinois University; M.S., University of Wisconsin; Ph.D., University of Southern California
Assistant Professor of Physical Education, and
Coordinator of Graduate Studies Division — 1977
- Gregory M. Dotseth** — B.A., Luther College; M.A., Western Washington State College; Ph.D., Iowa State University
Associate Professor of Mathematics — 1966 (1974)
- James L. Doud** — B.S.E., M.S.E., Drake University; Ph.D., University of Iowa
Associate Professor of Teaching: Elementary Education — 1970 (1978)

Virgil E. Dowell — B.S., M.S., Kansas State Teachers College; Ph.D., University of Oklahoma
Professor of Biology — 1956 (1968)

John Charles Downey — B.S., M.S., University of Utah; Ph.D., University of California, Davis Campus
Professor of Biology
Dean of the Graduate College — 1968 (1981)

William H. Dreier — B.S., Iowa State University; M.A., Ph.D., University of Minnesota
Professor of Education — 1949 (1965)

Jacques F. Dubois — B.S., Kearney State College; M.A., University of Nebraska
Assistant Professor of French — 1966 (1971)

***Jerry M. Duea** — B.A., M.A.E., University of Northern Iowa; Ph.D., Iowa State University
Associate Professor of Teaching: School Administration — 1966 (1978)

Joan Meyer Duea — B.A., M.A., University of Northern Iowa
Professor of Teaching: Elementary Education — 1965 (1980)

Ann Mary Dunbar — B.A., Clarke College; M.A., Ed.S., University of Northern Iowa
Associate Professor of Education — 1962 (1972)

David R. Duncan — B.S., M.S., North Dakota State University; Ph.D., University of Michigan
Professor of Mathematics
Head of the Department of Mathematics — 1963 (1976)

Mary D. Durant — B.S., M.S., Virginia Polytechnic Institute and State University
Instructor in Home Economics — 1979

Norris M. Durham — B.S., West Chester State College, Pennsylvania; M.A., New York University; Ph.D., The Pennsylvania State University
Associate Professor of Anthropology
Head of the Department of Sociology and Anthropology — 1979

Whitfield Brown East — B.A., M.A., University of North Carolina; Ed.D., University of Georgia
Assistant Professor of Physical Education — 1979

Charlene M. Eblen — B.A., Wichita State University; M.A., University of Northern Iowa
Assistant Professor of English — 1967 (1970)

Roy E. Eblen — B.A., Williams College; M.A., Wichita State University; Ph.D., University of Iowa
Professor of Speech Pathology — 1960 (1968)

Felipe R.J. Echeverria — B.A., Florida Presbyterian College; M.F.A., University of Arkansas
Associate Professor of Art — 1969 (1979)

Jay Allen Edelnant — B.A., MacMurray College; M.A., Ph.D., Northwestern University
Associate Professor of Interpretation
Director of the Theatre — 1971 (1983)

John R. Eggers — B.S., Mankato State University; M.S., Temple University; Ed.S., Mankato State University; Ed.D., University of Northern Colorado
Assistant Professor of Teaching
Coordinator of Student Teaching — 1982

Jeffrey Ehrenreich — B.S., University of Bridgeport; M.A., New School for Social Research, New York
Assistant Professor of Anthropology — 1981

John L. Eiklor — B.A., University of Wichita; M.A., Ph.D., Northwestern University
Professor of History — 1963 (1970)
Acting Director, Museum — 1982

Lawrence Jon Eilers — B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa
Professor of Biology — 1968 (1977)

Ivan L. Eland — B.A., University of Northern Iowa; M.A., University of Colorado
Associate Professor of Education
Director of Safety Education — 1960 (1966)

Robert Eller — B.A., M.A., University of Iowa
Assistant Professor of Educational Media
Coordinator of Audio-Visual Services — 1961 (1966)

Mark C. Ellis — B.A., University of Northern Iowa; M.A., Mankato State College
Instructor in Teaching: Music — 1980

Ralph D. Engardt — B.S., Ph.D., Iowa State University
Associate Professor of Physics — 1965 (1973)

Dorothy Kessler Engstrom — B.A., M.A., Ed.S., University of Northern Iowa
Assistant Professor
Coordinator of Student Teaching — 1981 (1982)

Harley E. Erickson — B.S., Wisconsin State University, LaCrosse; M.S., Ph.D., University of Wisconsin
Professor of Education — 1963 (1967)

Donald R. Erusha — B.A., Coe College; M.A., University of Iowa
Associate Professor of Physical Education — 1963 (1972)

***Reed Estabrook** — B.F.A., Rhode Island School of Design; M.F.A., University of Arkansas
Associate Professor of Art — 1974 (1978)

Susan Larson Etscheidt — B.A., M.A., University of Northern Iowa
Instructor in Special Education — 1979

Russell E. Euchner — B.A., M.A., University of Northern Iowa
Assistant Professor of Education — 1960

Wayne R. Evenson — B.A., B.S.E.E., J.D., University of Iowa
Professor of Business and Labor Law — 1966 (1972)

Ann Boyd Fagle — B.A., M.A., University of Northern Iowa
Instructor in Spanish — 1976 (1981)

Mohammed F. Fahmy — B.S., Ain-Shams University, Cairo; M.S., Rensselaer Polytechnic Institute; Ph.D., Michigan State University
Assistant Professor of Industrial Technology — 1983

Farhad Farzaneh — B.S., M.S., Iowa State University
Assistant Professor of Computer Science — 1982

Manuel A. Febles — B.A., B.S., Instituto de Cárdenas, Cuba; Doctor in Law, Universidad de la Habana; M.A., Ph.D., University of Iowa
Associate Professor of Spanish — 1967 (1976)

John T. Fecik — B.S., State Teachers College, California; M.Ed., Ed.D., University of Maryland
Professor of Industrial Technology
Head of the Department of Industrial Technology — 1981

Rosa Maria E. Findlay — B.A., University of Puerto Rico; M.A., University of Northern Iowa
Instructor in Teaching: Foreign Language — 1964

Donald G. Finegan — B.F.A., M.A., Ohio State University
Professor of Art — 1955 (1966)

Judith M. Finkelstein — B.S., University of Illinois; M.A., University of Northern Iowa; Ph.D., University of Minnesota
Assistant Professor of Teaching: Early Childhood Education — 1968 (1971)

D. Louis Finsand — B.S., University of Wisconsin, LaCrosse; M.A., University of Northern Iowa
Professor of Teaching: Science — 1964 (1979)

Stephen J. Fortgang — B.A., University of Chicago; M.A., Ph.D., Syracuse University
Associate Professor of Education — 1975 (1981)

Bernard A. Fox, Captain — B.A., Lake Superior State College
Instructor of Military Science — 1982

- Adolfo Mariano Franco** — B.A., Instituto de Cárdenas, Cuba; Doctor in Law, Universidad de la Habana, Cuba; M.A., Ph.D., University of Iowa
Associate Professor of Spanish — 1967 (1975)
- Robert L. Frank** — B.S., M.E., Ed.D., University of Nebraska
Professor of Education and Psychology — 1982 (1970)
- Mary L. Franken** — B.S., University of Wisconsin, Stout; M.S., University of Wisconsin, Madison; Ed.D., Drake University
Associate Professor of Home Economics
Head of the Department of Home Economics — 1969 (1980)
- Joseph E. Fratianni** — B.S., Bridgewater State College; M.S., Ph.D., University of Wisconsin, Madison
Assistant Professor of Teaching
Coordinator of Student Teaching — 1971
- Arnold J. Freitag** — B.S., Purdue University; M.S., Iowa State University
Assistant Professor of Industrial Technology — 1968
- Taggart F. Frost** — B.S., M.S., Ph.D., Brigham Young University
Assistant Professor of Management — 1978
- Len A. Froyen** — B.A., University of Northern Iowa; M.A., Michigan State University; Ed.D., Indiana University
Professor of Education — 1958 (1973)
- Sara Jane Frudden** — B.A., M.A., Ed.S., University of Northern Iowa; Ph.D., Iowa State University
Assistant Professor in Special Education — 1974 (1981)
- James F. Fryman** — B.A., Denison University; M.A., Miami University, Ohio; Ph.D., University of North Carolina, Chapel Hill
Assistant Professor of Geography — 1978
- Sherry Kay Gable** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Assistant Professor of Education — 1974 (1980)
- Jayne I. Gackenbach** — B.A., New Mexico State University; M.S., Ph.D., Virginia Commonwealth University
Assistant Professor of Psychology — 1980
- *Steven J. Gaies** — B.A., Hamilton College; M.A., Ph.D., Indiana University
Associate Professor of Psychology
- Linda F. Gammill** — B.S., M.S., Eastern New Mexico University
Visiting Assistant Professor — 1981
- Joyce Alene Gault** — B.A., University of Northern Iowa; M.Mus., D.Mus., Northwestern University
Professor of Piano — 1957 (1969)
- Patricia L. Geadelmann** — B.A., University of Northern Iowa; M.A., University of Iowa; Ed.D., University of North Carolina
Associate Professor of Teaching: Physical Education — 1972 (1979)
- John L. Gilbertson** — B.S., University of North Dakota; M.A., Mankato State University
Instructor of Theatre — 1982
- Albert R. Gilgen** — A.B., Princeton University; M.A., Kent State University; Ph.D., Michigan State University
Professor of Psychology
Head of the Department of Psychology — 1973
- Charles C. Gillette** — B.S., Iowa State University; M.A., University of Northern Iowa; Ph.D., Oklahoma State University
Associate Professor of Economics — 1966 (1972)
- Andrew R. Gilpin** — B.S., M.A., Ph.D., Michigan State University
Associate Professor of Psychology — 1974 (1979)
- Robert F. Gish** — B.A., M.A., Ph.D., University of New Mexico
Professor of English — 1967 (1979)
- Catherine B. Gladin** — B.S., M.Ed., University of Illinois
Instructor in Recreation — 1983
- Linda Gleissner** — B.S., Wisconsin State University, Stevens Point; M.A., University of Northern Iowa
Instructor in Teaching: Special Education — 1981
- George David Glenn** — A.B., Shimer College; M.A., Northern Illinois University; Ph.D., University of Illinois
Associate Professor of Theatre — 1966 (1975)
- Kenneth G. Gogel** — B.S., M.A., Ohio State University
Professor of Art — 1950 (1974)
- Cynthia R. Goldstein** — B.A., University of Michigan; M.A., Michigan State University
Assistant Professor of English — 1983
- Ralph M. Goodman** — B.A., M.A., Ph.D., University of California, Los Angeles
Associate Professor of English and Linguistics — 1964 (1970)
- Robert Charles Goss** — B.S. Huntington, College; M.S., Ph.D., Purdue University
Professor of Biology — 1961 (1968)
- Lynda Goulet** — B.S., Denison University; M.B.A., University of Northern Iowa
Lecturer in Management — 1979
- Peter G. Goulet** — B.A., Denison University; M.B.A., Ph.D., Ohio State University
Associate Professor of Management — 1974 (1977)
- Jack E. Graham** — B.Mus.Ed., Wichita State University; M.Mus., North Texas State University
Associate Professor of Clarinet — 1967 (1982)
- William H. Graves** — B.A., M.A., Ph.D., Florida State University
Visiting Assistant Professor of History — 1983
- Elton E. Green** — B.S., M.S., Kansas State University; Ph.D., University of Northern Colorado
Professor of Physical Education — 1968 (1972)
- Kenneth N. Green** — B.S., Iowa State University; M.A., University of Northern Iowa; Ed.D., University of Arkansas
Associate Professor of Recreation, and
Coordinator of Campus Recreation Division — 1967 (1974)
- Wanda Kay Green** — A.B., M.A., University of Northern Colorado
Assistant Professor of Physical Education — 1967 (1975)
- Mitchell A. Greene, Jr.** — B.S., Dillard University; M.A., Case Western Reserve University; Ph.D., University of Iowa
Associate Professor of Social Work — 1972 (1977)
- Mary Kay Grosso** — B.S., Illinois State University; M.S., Marshall University
Instructor in Physical Education — 1983
- Maynard Gunter** — B.A., M.A., Brigham Young University; Ed.D., Pennsylvania State University
Assistant Professor of Art — 1981
- Carlin F. Hageman** — B.A., M.A., Ph.D., University of Colorado
Assistant Professor of Communicative Disorders — 1982
- Leslie W. Hale** — B.M.E., M.M.E., Drake University; D.M.A., University of Missouri, Kansas City
Professor of Teaching: Music — 1960 (1974)
- G. Jon Hall** — B.A., Central State University, Oklahoma; M.A., Ph.D., Southern Illinois University
Associate Professor of Communication Studies
Head of the Department of Communication and Theatre Arts — 1973
- James G. Hall** — B.S., M.S., Eastern Illinois University
Instructor in Physical Education — 1983
- Fred William Hallberg** — B.A., M.A., University of Minnesota; M.S., Iowa State University; Ph.D., University of Minnesota
Associate Professor of Philosophy — 1967 (1972)

Gaylon L. Halverson — B.A., Luther College; M.A., University of Northern Iowa; D.B.A., Indiana University; C.P.A.
Professor of Accounting
Head of the Department of Accounting — 1963 (1981)

Albert Charles Haman — B.A., University of Iowa; M.A., Michigan State University
Associate Professor of Biology — 1961 (1972)

Susan M. Hamre-Nietupski — B.S., M.S., Ph.D., University of Wisconsin, Madison
Assistant Professor of Special Education — 1980

James L. Handorf — B.A., University of Northern Iowa; M.A., Ph.D., University of Northern Colorado
Associate Professor of Business Education and Administrative Management — 1966 (1973)

Kay L. Hanna — B.A., University of Northern Iowa
Instructor of Teaching: Mathematics — 1983

Glenn L. Hansen — B.A., M.A., University of Northern Iowa; Ph.D., Texas A & M University
Associate Professor of Business Education and Administrative Management
Dean of the Division of Continuing Education and Special Programs — 1964 (1982)

Jon Edward Hansen — B.A., M.A., University of Northern Iowa
Associate Professor of Trombone — 1969 (1974)

Richard B. Hansen — B.A., St. Ambrose College; M.A., Ph.D., University of Nebraska, Lincoln
Assistant Professor of Economics — 1978

Carole J. Hanson — B.A., Luther College; M.A., Michigan State University; Ed.D., University of Nebraska, Lincoln
Associate Professor of Recreation
Coordinator of Recreation Division — 1981

Donald L. Hanson — B.A., M.A., University of Northern Iowa; Ed.D., University of Wyoming
Professor of Education — 1966 (1970)

Robert W. Hanson — B.A., Bemidji State College; M.S., University of Minnesota; Ph.D., University of Iowa
Professor of Chemistry and Science Education — 1963 (1966)

Roger J. Hanson — B.S., Gustavus Adolphus College; M.A., Ph.D., University of Nebraska
Professor of Physics — 1969

James N. Hantula — B.A., M.A., University of Michigan
Associate Professor of Teaching: Social Studies — 1965 (1975)

Keith Hardeman — B.A., Golden West College; M.A., California State University-Long Beach
Instructor of Communication Studies — 1982

Robert R. Hardman — B.S., Maryland State Teachers College; M.S., Ed.D., Indiana University
Professor of Educational Media
Director of the Educational Media Center — 1970 (1974)

E. Jeanne McClain Harms — B.A., M.A.E., Ed.S., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of Education — 1967 (1973)

Gordon M. Harrington — B.E.E., Georgia Institute of Technology; Ph.D., Yale University
Professor of Psychology — 1963 (1968)

Judith F. Harrington — B.S., Boston University; M.A., University of Iowa
Assistant Professor of Speech Pathology — 1965 (1969)

Edwin H. Harris — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Art — 1982

Virginia L. Hash — B.S., Iowa State University; M.A., Ed.S., University of Northern Iowa; Ph.D., Iowa State University
Associate Professor of Education
Associate Dean, Division of Continuing Education and Special Programs — 1966 (1983)

Catherine Woledge Hatcher — B.A., M.S., Ph.D., Purdue University
Associate Professor of Education, and
Coordinator of the Reading Clinic — 1975 (1980)

Shirley E. Haupt — B.A.E., School of the Art Institute of Chicago; M.F.A., University of Iowa
Professor of Art — 1966 (1980)

Richard R. Hawkes — B.S., University of Omaha; M.S., University of Nebraska, Omaha; Ph.D., University of Nebraska, Lincoln
Associate Professor of Teaching
Coordinator of Student Teaching — 1969 (1976)

D.C. Hawley — B.A.Ed., Kearney State College; M.A., Ph.D., University of Iowa
Professor of Spanish — 1966 (1970)

R. Allen Hays, Jr. — B.A., John Hopkins University; M.A., Ph.D., University of North Carolina
Assistant Professor of Political Science — 1979

Marvin O. Heller — B.S., M.E., University of Nebraska; Ed.D., University of Northern Colorado
Associate Professor of Education — 1970 (1974)

Louis R. Hellwig — B.A., M.A., New Mexico State University; Ph.D., University of Missouri, Columbia
Assistant Professor of Psychology — 1964 (1965)

Bill Henderson — B.A., Central State College, Oklahoma; M.A., University of Houston; Ph.D., University of Minnesota
Associate Professor of Communication Studies
Director of Forensics — 1978

Glen F. Henry — B.S., M.S., Nebraska State College at Chadron
Associate Professor of Physical Education — 1966 (1974)

Larry Duncan Hensley — B.A., Southern Methodist University; M.S., Indiana University; Ed.D., University of Georgia
Assistant Professor of Physical Education — 1979

Lous T. Heshusius — B.S., Via College, Netherlands; B.S., Western Illinois University; M.Ed., Texas A & M University; Ph.D., Indiana University
Assistant Professor of Teaching: Special Education — 1979

James J. Hiduke — B.A., St. Joseph's College, Indiana; M.A., Marquette University
Assistant Professor of English — 1967 (1973)

Clifford L. Highnam — B.A., Western Washington State College; M.S.P.A., University of Washington; Ph.D., Bowling Green State University
Associate Professor of Speech Pathology — 1975 (1982)

Leah F. Hiland — B.S., M.A.L.S., Ph.D., Indiana University
Assistant Professor of Library Science — 1972

Thomas W. Hill — B.S., University of Wisconsin; Ph.D., University of Pennsylvania
Associate Professor of Anthropology — 1972 (1978)

Jody M. Hines — B.S., M.A.T., University of Iowa
Instructor in Teaching: Science — 1978

Darrel B. Hoff — B.A., Luther College; M.A., University of Northern Iowa; Ph.D., University of Iowa
Professor of Astronomy and Science Education — 1964 (1975)

Randy A. Hogancamp — B.A., University of Northern Iowa; M.Mus., Northwestern University
Assistant Professor of Percussion — 1972 (1976)

A. John Holstad — B.S., Northern State College, South Dakota; M.Mus., D.Mus., Northwestern University
Associate Professor of Piano — 1962 (1973)

Karl M. Holvik — B.A., Concordia College, Minnesota; M.A., Eastman School of Music, University of Rochester; Ph.D., University of Iowa Professor of Instrumental Conducting — 1947 (1965)

Martha T. Holvik — B.S.Ed., University of Minnesota; M.A. University of Northern Iowa
Assistant Professor of Viola and Theory — 1968 (1977)

Charles A. Honeycutt — B.A. (French), B.A. (English), University of North Carolina, Charlotte; M.A., Appalachian State University; Ph.D., Ohio State University
Assistant Professor of French — 1983

Joyce J. Hornby — B.A., Northwestern College, Minneapolis; B.A., University of Minnesota, Duluth; M.A., University of Northern Colorado
Assistant Professor of Teaching: Elementary Education — 1973

Max M. Hosier — B.A., Nebraska State Teachers College; M.A., Ed.D., University of Northern Colorado
Professor of Education — 1951 (1966)

Grace Ann Hovet — B.A., College of St. Catherine; M.A., University of Minnesota; Ph.D., University of Kansas
Associate Professor of English — 1969 (1977)

Theodore R. Hovet — B.S., North Dakota State College; M.A., University of Minnesota; Ph.D., University of Kansas
Professor of English — 1969 (1979)

Genevieve E. Hubly — B.A., Rice University; M.A., M.F.A., University of Iowa; Ph.D., University of Oregon
Associate Professor of English — 1967 (1978)

Sharon Huddelston — B.S., M.A.E., Stephen F. Austin State University; Ph.D., University of Iowa
Assistant Professor of Physical Education — 1973 (1983)

Ruth A. Hunt — B.A., University of Wisconsin, Eau Claire; M.A., University of Northern Iowa
Instructor of Communication Studies — 1983

Patrick B. Hurst — B.S., Iowa State University
Assistant Professor of Economics — 1983

David B. Ingram — B.A., University of California, Irvine; M.A., Ph.D., University of California, San Diego
Assistant Professor of Philosophy — 1980

Gerald W. Intemann — B.S., M.S., Ph.D., Stevens Institute of Technology
Professor of Physics
Head of the Department of Physics — 1980

Edward Jamosky — B.A., M.A. in Russian, M.A. in Library Science, University of Wisconsin
Assistant Professor of Russian — 1965 (1969)

Allen D. Jedlicka — B.A., San Diego State University; Ph.D., Northwestern University
Professor of Organizational Behavior — 1973 (1982)

Joanna Jenner — B.Mus., Juilliard School of Music
Instructor of Violin — 1983

Marvin D. Jensen — B.A., Midland Lutheran College; M.A., University of Kansas
Assistant Professor of Communication Studies — 1966 (1969)

Verner Jensen — B.S., University of Nebraska; M.S., Iowa State University
Professor of Physics — 1956 (1974)

M. Lathon Jernigan — B.Mus., M.Mus., Southern Methodist University; D.M.A., University of Texas, Austin
Associate Professor of Theory — 1971 (1977)

Ross M. Jewell — A.B., Wabash College; M.A., Indiana University
Associate Professor of English — 1951 (1969)

Charles D. Johnson — B.S., Florida State University; M.I.E., Western Carolina University; Ed.D., North Carolina State University
Assistant Professor of Industrial Technology — 1981

J. Keith Johnson — B.A., North Texas State University; M.Mus., University of Illinois
Professor of Trumpet — 1966 (1982)

Ronald W. Johnson — B.M.E., Texas Technical University; M.A., California State University, Northridge
Assistant Professor of Instrumental Music — 1982

Valdon L. Johnson — B.A., M.A., University of Northern Iowa
Assistant Professor of English and Linguistics — 1968 (1971)

W. Duane Johnson — A.B., Augustana College; M.S.L.S., University of Illinois; Ph.D., Indiana University
Assistant Professor of Library Science — 1979

Howard V. Jones, Jr. — B.A., M.A., Ph.D., Harvard University
Professor of History — 1954 (1964)

A. Theodore Kachel — B.A., Baylor University; M.A., University of Iowa; M.Div., Union Theological Seminary; Ph.D., Columbia University
Assistant Professor of Religion — 1979

Albert Kagan — B.S., Iowa State University
Assistant Professor of Marketing — 1979 (1980)

Elaine B. Kalmar — B.A., M.A., Ph.D., University of New Mexico
Associate Professor of English — 1971 (1978)

Lawrence L. Kavich — B.S., M.S., Ed.D., University of California, Los Angeles
Professor of Education
Head of the Department of Educational Psychology and Foundations — 1977

Thomas W. Keefe III — B.A., University of Colorado; M.S.W., University of Denver; D.S.W., University of Utah
Professor of Social Work — 1973 (1982)

James L. Kelly — B.S., M.S., Mankato State College
Assistant Professor of Teaching: Science — 1969 (1973)

Lawrence A. Kelsey — B.A., Ph.D., University of Iowa
Assistant Professor of Astronomy and Science Education — 1979

Dennis W. Kettner — B.A., M.A., University of Northern Iowa
Instructor in Teaching: Mathematics — 1975

Jack F. Kimball — B.A., University of Kansas City; M.A., Syracuse University; Ed.D., Columbia University
Associate Professor of Education — 1967

Lynn H. King — B.A., M.A., University of Northern Iowa
Instructor in Physical Education — 1976

Wayne A. King — B.A., State University of New York, Plattsburgh; M.A., Ph.D., University of Michigan
Assistant Professor of Education
Director of the Learning Skills Center — 1978

Carey H. Kirk — B.A., Princeton University; M.A., University of Virginia; Ph.D., Vanderbilt University; J.D., University of Iowa
Assistant Professor of Management — 1983

Gloria Kirkland — B.A., Fisk University; M.S., Ph.D., Indiana State University
Associate Professor of Teaching: Early Childhood Education — 1978 (1983)

William B. Kline — B.A., M.A., University of Mississippi; Ph.D., University of Michigan
Assistant Professor of Education — 1982

Aurelia L. Klink — B.A., M.A., University of Northern Iowa
Assistant Professor of Business Education and Administrative Management — 1966 (1969)

Jerome F. Klinkowitz — B.A., M.A., Marquette University; Ph.D., University of Wisconsin
Professor of English — 1972 (1976)

Fritz H. König — B.A., University of Heidelberg; Candidatus Magisterii, University of Oslo; M.A., Ph.D., University of Iowa
Professor of German
Head of the Department of Modern Languages — 1967 (1975)

Jürgen Koppensteiner — Ph.D., University of Graz, Austria
Professor of German — 1968 (1976)

***Elmer John Kortemeyer** — B.S., M.A., University of Wyoming
Assistant Professor of Health Education — 1965 (1968)

Robert J. Krajewski — B.S., M.S., University of Illinois; Ed.D., Duke University
Professor of Education
Head of the Department of Educational Administration and Counseling — 1981

Robert E. Kramer — Ph.B., M.A., University of North Dakota
Assistant Professor of Sociology — 1965 (1970)

Marilou DeWall Kratzenstein — B.A., Calvin College; M.A., Ohio State University; D.M.A., University of Iowa
Professor of Organ and Music History — 1975 (1983)

Marian E. Krogmann — B.S., South Dakota State University; M.A., Ph.D., University of Iowa
Associate Professor of Political Science — 1967 (1970)

Dean Kruckeberg — B.A., Wartburg College; M.A., Northern Illinois University, DeKalb
Assistant Professor of Public Relations — 1983

Raymond W. Kuehl — B.S., Upper Iowa University; M.A., University of Iowa; Ed.S., Drake University; Ph.D., University of Iowa
Professor of Teaching
Coordinator of Student Field Experiences — 1966 (1980)

Roger A. Kueter — B.A., Loras College; M.S., Ed.D., Indiana University
Associate Professor of Education — 1970 (1974)

Loretta Sylvia Kuse — B.S., Wisconsin State University; M.A., Ph.D., University of Iowa
Assistant Professor of Education — 1972

Geraldine E. LaRocque — B.S., M.A., University of Minnesota; Ph.D., Stanford University
Professor of English
University Liaison for Teacher Education — 1972 (1983)

Catherine M. Larsen — B.A., Washington State University; M.A., Seattle Pacific University
Instructor of Teaching: Music — 1983

James P. LaRue — B.S., Southeast Missouri State College; M.A., Colorado State College of Education; Ed.D., Pennsylvania State University
Professor of Industrial Technology — 1956 (1971)

***Richard T. Lattin** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Education — 1947 (1969)

Roger W. Lawson, Lt. Col. — B.S., University of Iowa; M.A., University of Missouri
Professor of Military Science
Head of the Department of Military Science — 1983

Cherin Ann Lee — B.A., University of Northern Iowa
Instructor in Biology and Science Education — 1981 (1982)

Key Ton Lee — Union College, Nebraska; M.A., Andres University, Michigan; Ph.D., University of Oklahoma
Professor of Education — 1967 (1978)

Robert E. Lee — B.A., M.A., University of Northern Iowa
Instructor in Teaching: Physical Education — 1981

Robert H. Lee — B.A., College of St. Francis; M.B.A., Northern Illinois University
Lecturer in Marketing — 1982

Sherry Leedy — B.F.A., Kansas City Art Institute; M.F.A., University of Kansas
Assistant Professor of Art — 1983

Robert T. Lembke — B.S., M.S., Mankato State College; Ed.D., University of South Dakota
Associate Professor of Education — 1974

William Lenihan — B.G.S., M.A., University of Iowa
Assistant Professor of Public Relations — 1983

Thomas L. Little — B.A., Macalester College; M.Ed., University of Mississippi; Ed.D., Memphis State University
Associate Professor of Special Education — 1973 (1978)

Bonnie H. Litwiller — B.S.Ed., M.S.Ed., Illinois State University; M.A.T., Ed.D., Indiana University
Professor of Mathematics — 1968 (1976)

John C. Longnecker — B.A., M.A., University of Northern Iowa
Assistant Professor of Mathematics — 1966 (1980)

Donald J. Loritz — B.A., M.A.T., Harvard University; Ed.D., Boston University
Assistant Professor — 1982

Fred W. Lott — A.B., B.S., Cedarville College, Ohio; M.A., Ph.D., University of Michigan
Professor of Mathematics
Assistant Vice-President, Academic Affairs — 1949 (1971)

Barbara S. Lounsberry — B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa
Assistant Professor of English — 1976

Norbert L. Lovata — B.A., M.S., University of Wyoming
Assistant Professor of Industrial Technology — 1979

Peter E. Lowther — B.S., Iowa State University; M.A., Ph.D., University of Kansas
Assistant Professor of Biology — 1981

Jonathan J. Lu — B.Ed., Taiwan Normal University; B.D., Asbury Theological Seminary; M.A., Ohio State University; Ph.D., University of Washington
Professor of Geography — 1973 (1980)

Cheryl Ann Lubinski — B.S., M.Ed., University of Minnesota
Instructor in Teaching: Elementary Education — 1982

Gene M. Lutz — B.S., M.S., Ph.D., Iowa State University
Associate Professor of Sociology — 1973 (1978)

H. Lewis Lynch — B.S., M.Ed., University of Nebraska, Lincoln; Ed.D., University of Wyoming
Associate Professor of Teaching
Coordinator of Student Teaching — 1951 (1969)

Howard W. Lyon — B.A., M.S., University of Iowa
Assistant Professor of Chemistry — 1956 (1959)

Tony N. McAdams — B.A., University of Northern Iowa; J.D., University of Iowa; M.B.A., Columbia University
Professor of Management
Head of the Department of Management — 1982

John B. MacArthur — A.C.C.A. Professional Accountancy Qualification; M.A., University of Lancaster, Lancashire, England; C.P.A.
Assistant Professor of Accounting — 1981

David V. McCalley — B.A., M.A., University of Northern Iowa; Ed.D., University of Northern Colorado
Associate Professor of Biology and Science Education — 1966 (1980)

Janet E. McClain — B.S., Northern Illinois University; M.S.Ed., University of Dayton, Ohio
Instructor in Teaching: Elementary Education — 1976

Clifford G. McCollum — B.S., M.A., Ed.D., University of Missouri
Professor of Biology
Dean of the College of Natural Sciences — 1949 (1968)

Kenneth J. McCormick — B.A., University of California, Riverside; Ph.D., Iowa State University
Assistant Professor of Economics — 1982

- James G. McCullagh** — B.A., California State College, Chico; M.S.S.W., University of Missouri, Columbia; Ed.D., Northern Illinois University, DeKalb
Associate Professor of Social Work — 1981 (1983)
- Norman L. McCumsey** — B.S., Oregon College of Education; M.Ed., University of Oregon; Ed.D., Colorado State College
Associate Professor of Education — 1967 (1970)
- Bonnie McEndree** — B.S., M.A., Ph.D., Bowling Green State University
Assistant Professor of Radio-Television — 1983
- LeRoy A. McGrew** — B.A., Knox College; M.S., Ph.D., University of Iowa
Professor of Chemistry
Head of the Department of Chemistry — 1977
- Mary Lou McGrew** — B.A., University of Northern Iowa; M.A., University of Iowa
Assistant Professor of Library Science — 1970 (1975)
- Kent Alan McIntyre** — B.A., University of Iowa; M.A., University of Denver
Associate Professor of Teaching: Educational Media — 1968 (1974)
- Carol E. MacKinnon** — B.S., Old Dominion University; M.S., Ph.D., University of Georgia
Assistant Professor of Home Economics — 1983
- James G. MacMillan** — B.A., Western Washington State College; Ph.D., The Ohio State University
Associate Professor of Chemistry — 1972 (1977)
- Hilliard K. Macomber** — B.S., M.S., University of California, Berkeley; Ph.D., Harvard University
Associate Professor of Physics — 1976 (1977)
- Marc C. Mahlios** — B.S., B.A., M.A., Ph.D., Arizona State University
Associate Professor of Teaching
Director of Student Field Experiences — 1983
- Donna Maier** — B.A., The College of Wooster; M.A., Ph.D., Northwestern University
Associate Professor of History — 1978 (1981)
- Gary L. Malecha** — B.A., College of St. Thomas; M.A., University of Notre Dame
Assistant Professor — 1983
- Joseph J. Marchesani** — B.A., Fordham University; M.S., Brooklyn College; M.Ed., Temple University
Assistant Professor of Educational Media
Coordinator of Television Services — 1972
- Barbara K. Mardis** — B.A., Shimer College; M.B.A., University of Northern Iowa
Instructor in Management — 1981
- Jeanette J. Marsh** — B.S., Mankato State College; M.S., University of New Mexico
Assistant Professor of Physical Education — 1975
- Ripley E. Marston** — B.S., Madison College; M.S., University of Tennessee, Knoxville; Ph.D., University of Iowa
Assistant Professor of Physical Education — 1976 (1983)
- Elizabeth Ann Martin** — B.A., Wartburg College; M.A., University of Minnesota
Associate Professor of Library Science
Head of the Department of Library Science — 1962 (1972)
- Robert F. Martin** — B.A., Wofford College, South Carolina; M.A., Ph.D., University of North Carolina, Chapel Hill
Visiting Assistant Professor of History — 1981
- A. Marleta Matheson** — B.M.E., Simpson College; M.Mus., University of Michigan
Assistant Professor of Group Piano and Accompanying — 1964 (1976)
- Micol R.C. Maughan** — B.S., Ph.D., Brigham Young University
Assistant Professor of Management (1980)
- Charles R. May** — B.S., West Texas State University; M.A., Eastern New Mexico University; Ph.D., The Ohio State University
Professor of Curriculum and Instruction
Head of the Department of Curriculum and Instruction — 1982
- Donald E. Maypole** — B.S., Idaho State College; M.S.S.W., University of Wisconsin; Ph.D., University of Minnesota
Associate Professor of Social Work — 1979 (1982)
- Peter M. Mazula** — B.S., University of New York, Courtland; M.A., Ed.D., Columbia University
Professor of Teaching: Safety Education — 1949 (1973)
- Charles L. Means** — B.S., Southern Illinois University; M.A., Webster College; Ph.D., St. Louis University
Adjunct Associate Professor of Education
Assistant Vice President for Academic Affairs for EOP/SCS — 1983
- Josephine J. Megivern** — B.A., M.A., University of Northern Iowa
Assistant Professor of Home Economics — 1967 (1972)
- Gloria V. Melara** — B.S., Universidad Nacional de El Salvador; M.A., M.S., Western Michigan University
Assistant Professor of Computer Science — 1983
- Margaret M. Merrion** — B.S., Chicago State University; M.Ed., Ph.D., University of Missouri, Columbia
Assistant Professor of Music Education — 1978 (1981)
- Jane C. Mertesdorf** — B.A., Mankato State College; M.A., Ball State University
Assistant Professor of Recreation — 1969 (1975)
- William K. Metcalfe** — B.S., M.A., Washington University, St. Louis; Ph.D., Syracuse
Professor of Political Science — 1961 (1969)
- Peter S. Michaelides** — B.Mus., Baldwin-Wallace College; M.Mus., Oberlin College; D.M.A., University of Southern California
Professor of Theory and Composition — 1965 (1978)
- Michael H. Millar** — B.A., Harvard University; M.S., Ph.D., University of Chicago
Professor of Mathematics — 1962 (1975)
- Leslie C. Miller III** — B.S., M.S., Southwest Texas State University; Ed.D., West Virginia University
Assistant Professor of Industrial Technology — 1979
- Patrick W. Miller** — B.S., M.Ed., Bowling Green State University; Ph.D., The Ohio State University
Associate Professor of Industrial Technology — 1981
- Geoffrey T. Mills** — B.S., M.S., Ph.D., University of Illinois
Assistant Professor
Assistant Dean and Coordinator of Graduate Programs — 1983
- Patrick Brian Moffit** — B.S., M.A., Central Michigan University; Ph.D., University of Utah
Assistant Professor of Health Education — 1980
- Charles E. Moore** — B.A., M.S., Bemidji State University; Ed.D., University of Nebraska
Assistant Professor of Teaching: Administration — 1983
- David W. Moore** — B.A., M.Ed., University of Arizona; Ph.D., University of Georgia
Assistant Professor of Curriculum and Instruction: Reading — 1982
- Sharon A. Moore** — B.S., B.A., M.S., Ohio University; Ph.D., University of Georgia
Assistant Professor of Curriculum and Instruction: Reading — 1982
- David L. Morgan** — B.A., Swarthmore College; M.A., Washington University, St. Louis
Assistant Professor of Philosophy — 1969
- Janice M. Morgan** — B.S.E., M.S.E., University of Missouri, Columbia; Ph.D., Iowa State University
Associate Professor of Home Economics — 1972 (1975)

Karen C. Morgan — B.A., Albion College; M.S., Iowa State University; Ph.D., The Ohio State University
Assistant Professor of Home Economics — 1981

Rick L. Morgan — B.A., West Virginia Wesleyan College; M.A., Ohio State University
Instructor in Management — 1981

Robert E. Morin — B.A., M.S., Northwestern University; Ph.D., University of Wisconsin
Professor of Psychology
Director, Center for Business and Behavioral Research
Dean of the College of Social and Behavioral Sciences — 1972

Raúl Muñoz — B.A., M.A., in Sociology, University of Nebraska; M.A., in Spanish Literature, Ph.D., Michigan State University
Associate Professor of Spanish — 1963 (1974)

Ben F. Myers — B.Ed., University of Toledo; M.S., Eastern Michigan University
Instructor of Teaching: Physical Education — 1982

Hyo Chul Myung — B.S., M.S., Seoul National University, Republic of Korea; Ph.D., Michigan State University
Professor of Mathematics — 1970 (1978)

Clinton Nelson — B.A., Midland Lutheran College; M.A., University of Nebraska; Ph.D., University of Iowa
Assistant Professor of Communication Studies — 1967

Glenn T. Nelson — B.Ed., Keene State College, New Hampshire; M.S.T., University of New Hampshire; Ph.D., University of Iowa
Associate Professor of Mathematics — 1974 (1980)

Philip J. Nelson — B.S., Augustana College, South Dakota; M.A., University of Nebraska, Omaha
Assistant Professor of Teaching: Social Studies — 1969 (1974)

Richard S. Newell — B.A., M.A., University of Washington; Ph.D., University of Pennsylvania
Professor of History — 1967 (1974)

Lee H. Nicholas — B.S., B.A., University of Kansas; M.B.A., University of Tulsa; C.P.A.
Assistant Professor of Accounting — 1974

Lynn E. Nielsen — B.A., University of Iowa; M.A., University of Northern Iowa; Ph.D., University of Iowa
Assistant Professor of Teaching: Elementary Education — 1980

Ross A. Nielsen — B.A., Wartburg College; M.S., Ph.D., University of Iowa
Professor of Teaching
Head of the Department of Teaching — 1947 (1962)

John A. Nietupski — B.A., M.S., Ph.D., University of Wisconsin, Madison
Assistant Professor of Special Education — 1980

Basheer K. Nijim — B.A., Augustana College, Illinois; M.A., Ph.D., Indiana University
Professor of Geography
Head of the Department of Geography — 1962 (1972)

Virgil C. Noack — B.A., M.A., University of Northern Iowa
Assistant Professor of Sociology — 1967 (1970)

Samuel Nodarse — Doctorate in Social Sciences, Doctorate in Law, Universidad de la Habana, Cuba; Ph.D., University of Illinois, Urbana
Professor of Spanish — 1964 (1975)

Jon G. Norem — B.S., M.B.A., University of North Dakota; C.P.A.
Assistant Professor of Accounting — 1973

Michael David Oates — A.B., Fairfield University; M.A.T., Assumption College; Ph.D., Georgetown University
Professor of French — 1967 (1975)

Earl Ockenga — B.S., Augustana College, South Dakota; M.S., University of South Dakota
Assistant Professor of Teaching: Mathematics — 1975

***Timothy E. O'Connor** — B.A., M.A., Creighton University; Ph.D., University of Minnesota
Assistant Professor of History — 1982

Karl Edward Odwarka — Diplom, Akademie fur Welthandel, Frankfurt, Federal Republic of Germany; A.B., M.A., Wayne State University; Ph.D., University of Michigan
Professor of German — 1964 (1979)

Dale Wilson Olson — B.A., Carleton College; Ph.D., University of Rochester
Associate Professor of Physics — 1968 (1973)

Onyle B. Onyle — B.F.A., M.F.A., Memphis State University
Instructor in Art — 1982

Alan R. Orr — B.S., Simpson College; M.S., Ph.D., Purdue University
Professor of Biology — 1965 (1978)

Larbi Oukada — B.A., M.A., University of Southwestern Louisiana; Ph.D., Louisiana State University
Assistant Professor of Teaching: Foreign Language — 1981

John H. Page, Jr. — B. of Design, University of Michigan; M.F.A., University of Iowa
Professor of Art — 1961 (1964)

John W. Pape — B.Mus., M.Mus., Southern Illinois University
Instructor in Opera/Music Theatre — 1979

Eugenia G. Parisho — B.A., University of Northern Iowa; M.A., University of Chicago
Assistant Professor of Teaching: Elementary Education — 1968

Henry H. Parker — B.A., St. Thomas College, Minnesota; M.A., University of Minnesota; Ph.D., University of Illinois
Associate Professor of Modern Languages — 1965 (1977)

Charles A. Patten — B.A., University of Northern Iowa; M.A., University of Oregon
Associate Professor of Physical Education — 1964 (1972)

Robert L. Paulson — B.S., M.A., University of Iowa
Associate Professor of Teaching: Educational Media — 1954 (1963)

Laurence J. Paxton — B.Mus., Ohio Wesleyan University; M.Mus., Indiana University
Assistant Professor of Voice — 1982

Alfred M. Pelham — B.B.A., M.B.A., University of Michigan
Assistant Professor of Marketing
Director, Small Business Development Center — 1983

Richard Arlen Penn — B.A., University of Northern Iowa; M.S.J. Medill School of Journalism, Northwestern University
Assistant Professor in Marketing — 1979 (1983)

Barbara E. Pershing — B.S., Western Illinois University; M.A., University of Northern Colorado; Ph.D., Iowa State University
Assistant Professor of Home Economics — 1971 (1976)

Rex W. Pershing — B.S., Western Illinois University; M.A.Ed., University of Northern Iowa; Ed.D., University of Northern Colorado
Associate Professor of Industrial Technology — 1965 (1972)

Elizabeth J. Peterson — A.B., M.S.L.S., University of Illinois; M.B.A., University of Northern Iowa
Instructor in Management — 1981

Kenneth R. Petty — B.S., Southwest Texas State University; M.Ed., Ed.D., Texas A & M University
Assistant Professor of Industrial Technology — 1983

Carol L. Phillips — B.Sc., The Ohio State University; M.A.T., Washington State University
Instructor in Physical Education — 1975

Neil Phillips — B.A., University of Northern Iowa; M.A., University of Houston; Ph.D., University of Kansas
Assistant Professor of Communication Studies — 1981

- Warren E. Picklum** — B.A., Colorado State University; M.S., Ph.D., Iowa State University
Associate Professor of Biology — 1957 (1974)
- Douglas T. Pine** — B.S., State University of New York, Oswego; M.A., Trenton State College; Ph.D., The Ohio State University
Associate Professor of Industrial Technology — 1981
- Nancy McClain Pittman** — B.S., Southeast Missouri State University; M.A., George Washington University; Ph.D., Texas Woman's University
Assistant Professor of Recreation — 1983
- Bruce L. Plakke** — B.A., M.A., Western Michigan University; Ph.D., Memphis State University
Assistant Professor of Audiology — 1978
- Paul J. Porter** — B.A., M.A., Ed.S., University of Northern Iowa; Ed.D., Drake University
Assistant Professor of Education — 1967 (1970)
- Lois Shefte Potter** — B.A., Hankton College; M.A., University of Iowa; Ph.D., University of Wisconsin
Professor of Teaching: Speech Pathology — 1950 (1972)
- Dan Powell** — B.A., M.A., Central Washington University; M.F.A., University of Illinois
Assistant Professor in Art — 1980 (1982)
- W. Dean Primrose** — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Business Education — 1973 (1976)
- Theophilus C. Prousis** — B.A., University of Minnesota; M.A., Tufts University; Ph.D., University of Minnesota
Visiting Assistant Professor of History — 1983
- Charles E. Quirk** — B.A., Carroll College, Wisconsin; B.D., McCormick Theological Seminary; Ph.D., University of Iowa
Associate Professor of History — 1963 (1969)
- Lora Lee Rackstraw** — B.A., Grinnell College; M.F.A., University of Iowa
Associate Professor of English — 1966 (1975)
- Allen Rappaport** — B.S., M.B.A., University of South Carolina; Ph.D., University of Texas
Associate Professor of Management — 1982
- Donna Bright Raschke** — B.S., Oklahoma State University, Stillwater; M.S., Ph.D., University of Wisconsin, Madison
Assistant Professor of Special Education — 1979
- Ned H. Ratekin** — B.A., Parsons College; M.A., Ph.D., University of Iowa
Professor of Education — 1965 (1971)
- Edward C. Rathmell** — B.A., Central College, Pella; M.A.Ed., Western Washington University; Ph.D., The University of Michigan
Professor of Mathematics — 1972 (1982)
- Jack C. Reed** — B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska
Associate Professor of Business Education and Administrative Management/
Teacher Educator in Office Education — 1965 (1969)
- Thomas J. Remington** — B.A., Regis College, Colorado; M.A., Ph.D., Kansas State University
Professor of English — 1970 (1983)
- Byron Renz** — B.S., Northwestern University, Evanston; Ed.M., Rutgers University, New Jersey; Ph.D., Wayne State University, Detroit
Assistant Professor of Radio-Television — 1983
- Mary Ann Renz** — B.A., Western Michigan University; M.A., Ph.D., Wayne State University, Detroit
Assistant Professor of Communication Studies — 1983
- Basil J. Reppas** — B.A., Athens University, Greece; M.A., American University of Beirut, Lebanon; Ph.D., University of Iowa
Professor of Education — 1961 (1976)
- Stefan Reuss** — Performers Certificate, Honover Hochschule for Music and Theatre; M.Mus., Julliard School of Music
Assistant Professor of Violincello — 1980 (1982)
- Gordon J. Rhum** — B.A., Iowa Wesleyan College; M.A., Ph.D., University of Iowa
Professor of Education — 1948 (1959)
- Jane E. Richards** — B.S., Bradley University; M.S., Ph.D., Southern Illinois University
Assistant Professor of Health Education — 1982
- Erwin W. Richter** — B.S., Northern Michigan University; M.A., University of Northern Iowa; Ph.D., University of Iowa
Associate Professor of Chemistry — 1963 (1972)
- Paul E. Rider** — B.A., Drake University; M.S., Iowa State University; Ph.D., Kansas State University
Professor of Chemistry — 1969 (1979)
- Ferdinand C. Riechmann** — B.A., M.A., University of Iowa
Associate Professor of Teaching: Social Studies — 1960 (1971)
- Dixon L. Riggs** — B.A., Marietta College, Ohio; M.S., University of Michigan
Associate Professor of Biology — 1958 (1970)
- *Glenda G. Riley** — B.A., Western Reserve University; M.A., Miami University, Ohio; Ph.D., Ohio State University
Professor of History — 1969 (1977)
Director of Women's Center — 1982
- Jeffrey L. Rinkel** — B.A., M.A., University of Northern Iowa
Instructor of Teaching: Language Arts — 1982
- Kenneth W. Risch** — B.S.Ed., University of Wisconsin, Oshkosh; M.F.A., University of Minnesota
Assistant Professor of Theatre — 1980
- Robert E. Ritschel** — B.A., Northwestern State College, Oklahoma; M.Mus., University of Texas, Austin; Ed.D., University of Illinois
Assistant Professor of Music Education — 1981
- Janet McMillan Rives** — B.A., University of Arizona; M.A., Ph.D., Duke University
Associate Professor of Economics — 1984
- Jan C. Robbins** — B.A., Pennsylvania State University; M.A., Ph.D., University of Minnesota
Professor of English
Head of the Department of English Language and Literature — 1976
- James B. Roberson** — B.S., Middle Tennessee State College; M.A., George Peabody College for Teachers
Associate Professor of Teaching
Coordinator of Student Teaching — 1964 (1971)
- Kenneth G. Roberts** — B.S., University of Minnesota; M.A., Washington State University
Instructor in Home Economics — 1982
- *Ronald Edward Roberts** — B.A., Drake University; M.A., Ph.D., Louisiana State University
Professor of Sociology — 1969 (1976)
- James B. Robinson** — B.A., Wabash College; M.A., Ph.D., University of Wisconsin
Associate Professor of Religion — 1971 (1980)
- Michael O. Rod** — B.A., Luther College; M.A., University of Northern Iowa; C.P.A.
Assistant Professor of Accounting — 1972 (1977)
- Bruce G. Rogers** — B.S., M.A., Arizona State University; Ph.D., Michigan State University
Associate Professor of Education — 1975
- Randall Rose** — B.A., Eastern Montana College; M.A., University of Montana; Ph.D., Purdue University, Indiana
Assistant Professor of Communication Studies — 1982
- Stephen A. Rose** — B.S., M.B.S., Ph.D., Ohio State University
Assistant Professor of Teaching: Social Studies — 1979

Robert L. Ross — B.A., University of Northern Iowa; M.A., Columbia University; Ph.D., Michigan State University
Professor of Political Science
Head of the Department of Political Science — 1962 (1971)

Ronald D. Ross — B.A., Marshall University, West Virginia; M.Mus., Indiana University; Ph.D., University of Cincinnati
Professor of Theory
Director of the School of Music — 1975 (1982)

***Roberta M. Roth** — B.S., Iowa State University, M.B.A., University of Northern Iowa
Instructor of Finance/Management — 1980 (1982)

Julia J. Rozendaal — B.A., M.A., Ed.S., University of Northern Iowa
Assistant Professor of Education — 1966 (1967)

Joseph M. Ruffo — B.F.A., Pratt Institute; M.F.A., Cranbrook Academy of Art
Professor of Art
Head of the Department of Art — 1976

Robert L. Rule — B.S., M.S., Ph.D., Iowa State University
Assistant Professor of Mathematics — 1966 (1977)

Edward Rutkowski — B.S., Marquette University; M.A., Ph.D., Michigan State University
Professor of Education — 1963 (1970)

Thomas G. Ryan — B.S.C., M.A., University of Iowa
Associate Professor of History — 1960 (1980)

Gary E. Sanders — B.S., Moorhead State University; M.Ed., Colorado State University
Instructor in Physical Education — 1977

Roy E. Sandstrom — B.A., Williams College; M.A., Ph.D., State University of New York, Buffalo
Associate Professor of History — 1969 (1978)

***John A. Schibrowsky** — B.S., University of Wisconsin, Superior; M.B.A., University of Northern Iowa
Instructor in Marketing — 1980 (1982)

Otis R. Schmidt — B.J., M.J., University of Texas, Austin; M.A. Sam Houston State College
Assistant Professor of English — 1965 (1968)

Donald W. Schmits — B.A., University of Evansville; M.S., Southern Illinois University; Ed.D., Rutgers University
Associate Professor of Education — 1976

Charles B. Scholz — B.S.Ed., M.A., Northern Illinois University
Assistant Professor of Radio-Television — 1969 (1976)

Augusta L. Schurrer — B.A., Hunter College; M.A., Ph.D., University of Wisconsin, Madison
Professor of Mathematics — 1950 (1963)

Karl E. Schwaab — B.S., University of Wisconsin, Oshkosh; M.S., Ph.D., Southern Illinois University
Assistant Professor
Coordinator of Student Teaching — 1982

Lynn C. Schwandt — B.A., Coe College; M.A., University of Northern Iowa; M.A., Stanford University
Associate Professor of Teaching: Mathematics — 1964 (1973)

Jane K. Sherwin Schwartz — B.A., Rockford College; M.A., Middlebury College; Ph.D., University of Michigan
Professor of French — 1962 (1972)

Orlando A. Schwartz — B.A., M.A., California State University, Long Beach; Ph.D., University of Kansas
Assistant Professor of Biology — 1980

Ralph J. Schwartz — B.S., Northwestern University; M.A., Marquette University; Ph.D., Purdue University
Associate Professor of Speech Pathology and Audiology — 1963 (1968)

Lyle E. Schwarzenbach — B.A., M.A., University of Northern Iowa; Ed.D., University of Wyoming
Associate Professor of HPER: Physical Education, and Coordinator of General Education Division — 1969 (1976)

Ralph S. Scott — B.A., Luther College; M.S.W., University of Wisconsin; Ph.D., University of Chicago
Professor of Education and Psychology
Director of the Education Clinic — 1965 (1968)

Robert Donald Seager — B.A., University of California, Santa Barbara; Ph.D., University of California, Davis
Assistant Professor of Biology — 1981

Kathleen A. Shaw — B.A., Dubuque University; M.A., Columbia University
Instructor of Teaching: Physical Education — 1983

Marjorie E. Shaw — B.A., M.A., University of Northern Iowa
Instructor in Education — 1980

Donald E. Shepardson — B.S., Eastern Illinois University; M.A., Ph.D., University of Illinois
Professor of History — 1970 (1979)

William J. Shepherd — B.S.Ed., M.F.A., Ohio University
Associate Professor of Bands and Low Brass — 1976

Allan Shickman — B.F.A., Washington University, St. Louis; M.A., University of Iowa
Assistant Professor of Art — 1970 (1977)

Carolyn L. Shields — B.A., Ph.D., University of Texas, Austin
Associate Professor of English and Linguistics — 1976 (1983)

Vera Jo Siddens — B.A., M.A., University of Northern Iowa
Assistant Professor of Art — 1968 (1971)

Robert John Simpson — B.A., Houghton College; M.S., Ph.D., University of Illinois
Associate Professor of Biology — 1965 (1968)

James C. Skaine — B.A., Sioux Falls College; M.A., University of South Dakota
Assistant Professor of Communication Studies — 1965

David T. Smalley — B.Mus., M.Mus., University of Michigan
Associate Professor of Voice — 1964 (1977)

Audrey L. Smith — A.B., Kentucky Wesleyan College; M.A., Northwestern University; M.A.Ed., Ed.D., Ball State University
Assistant Professor of Education — 1973

Daryl Dee Smith — B.A., University of Iowa; M.N.S., University of South Dakota; Ph.D., University of Iowa
Professor of Biology and Science Education
Head of the Department of Biology — 1967 (1982)

John Kenneth Smith — B.S., M.A., Ph.D., University of Wisconsin
Associate Professor of Education — 1971 (1978)

John W. Somervill — B.A., Southwestern University at Memphis; M.A., University of Mississippi; Ph.D., University of Arkansas
Professor of Psychology — 1975 (1979)

Joanne K. Spaide — B.S., University of Illinois; M.S., Ph.D., University of Iowa
Associate Professor of Home Economics — 1974 (1978)

Richard G. Stahlhut — B.A., Northern Illinois University; M.A., Western Michigan University
Assistant Professor of Teaching
Coordinator of Student Teaching — 1969 (1972)

Susan Bray Stainback — B.S., Radford College, Virginia; M.Ed., Ed.D., University of Virginia
Professor of Special Education — 1974 (1983)

William C. Stainback — B.S., Atlantic Christian College; M.S., Radford College; Ed.D., University of Virginia
Professor of Special Education — 1974 (1979)

*on leave

Benedict R. Stavis — B.A., Haverford College; M.A., Ph.D., Columbia University
Assistant Professor of Political Science — 1983

***Gregory P. Stefanich** — B.S., M.S., University of Minnesota; Ed.D., University of Montana
Professor of Education — 1976 (1981)

Angel Stewart — B.S., State University of New York, Oneonta; M.A., State University of New York, Buffalo
Instructor in Teaching
Coordinator of Student Teaching — 1980

William J. Stewart — B.S., State University of New York Plattsburgh; M.S., Siena College; Ed.D., State University of New York, Buffalo
Associate Professor of Education — 1980

Jerry D. Stockdale — B.S., M.S., Ph.D., Iowa State University
Professor of Sociology — 1973 (1980)

Susan E. Stodghill — B.A., M.A., University of California, Davis
Instructor in Physical Education — 1983

Marilyn W. Story — B.A., Ohio Wesleyan University; M.A., University of Michigan; Ph.D., Michigan State University
Professor of Home Economics — 1968 (1983)

Marlene I. Strathe — B.S., M.S., Iowa State University; Ed.S., University of Northern Iowa; Ph.D., Iowa State University
Associate Professor of Education
Director of Research and Development Center — 1976 (1982)

Charles T. Strein — B.A., University of Northern Iowa; M.A.T., Purdue University; M.A., Ph.D., University of Illinois
Assistant Professor of Economics — 1970

Elizabeth J. Strub — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education — 1972 (1981)

Richard F. Strub — B.A., University of Northern Iowa; M.A., University of Northern Colorado; Ed.D., University of South Dakota
Associate Professor of Teaching: Counseling — 1964 (1973)

Clare Struck — B.A., M.A., University of Northern Iowa
Instructor of Teaching: Counseling — 1983

Stephen D. Stulken — B.A., M.A., University of Northern Iowa
Assistant Professor of Industrial Technology — 1981 (1983)

Godfrey Stych — B.S.P.E., M.A., University of Iowa
Assistant Professor of Physical Education — 1966 (1969)

Edward Kitack Suh — B.A., M.A., Seoul National University; M.S.P., Boston College; Ph.D., Brandeis University
Assistant Professor of Social Work — 1979

Alvin R. Sunseri — B.A., Southeastern Louisiana College; M.A., Ph.D., Louisiana State University
Professor of History — 1967 (1975)

Annette C. Swann — B.A., Murray State University; M.A., Columbia University
Instructor of Teaching: Art — 1983

Betty M. Swanson — B.S., University of Minnesota; M.S., University of Southern California
Assistant Professor of Physical Education — 1949 (1957)

Harvey Sweet — B.S., Eastern Michigan University; M.S., Ph.D., University of Wisconsin
Associate Professor of Theatre — 1974 (1978)

Alice S. Swensen — B.A., University of Iowa; M.A., Ph.D., Oklahoma State University
Assistant Professor of English — 1978

Robert Dean Talbott — A.B., A.M., Ph.D., University of Illinois
Professor of Latin American History — 1967 (1974)

John E. Tarr — B.S.C., University of Iowa; M.A., University of Northern Iowa; Ph.D., University of Iowa
Professor of Teaching: Mathematics — 1961 (1974)

***Reggie Tate** — B.S., Iowa State University; M.A., University of Northern Iowa
Instructor in Marketing — 1980 (1982)

Beverly Weidler Taylor — B.S.Ed., Wartburg College; M.A., Ed.S., University of Northern Iowa; Ph.D., University of Iowa
Associate Professor of Education — 1968 (1978)

Nick E. Teig — B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska, Lincoln
Associate Professor of Teaching: Industrial Technology — 1967 (1977)

E. Russell TePaske — B.S., Westmar College; M.A., University of Northern Iowa; Ph.D., Oklahoma State University
Professor of Biology — (1963) 1971

Joan C. Tephly — B.S., University of Wisconsin; M.A., Ph.D., University of Iowa
Assistant Professor in Teaching: Early Childhood Education — 1981

Diane L. Thiessen — B.A., South Dakota State University; M.S.Ed., Ph.D., Southern Illinois University, Carbondale
Associate Professor of Mathematics — 1978 (1983)

Donna Jean Thompson — B.A., Western Washington State College; M.A., Wheaton College; Ph.D., The Ohio State University
Associate Professor of Physical Education — 1975

Howard J. Thompson — B.A., M.A., University of Iowa; A.M., Ph.D., Harvard University
Professor of History — 1955 (1966)

Marion R. Thompson — B.S., M.S., Southern Illinois University; Ed.D., Illinois State University
Professor of Special Education
Head of the Department of Special Education — 1978

Nancy Price Thompson — B.S., Cornell College; M.A., University of Northern Iowa
Professor of English — 1979

Thomas H. Thompson — B.A., M.A., Ph.D., University of Iowa
Professor of Philosophy
Dean of the College of Humanities and Fine Arts — 1952 (1982)

William R. Thrall — B.S., Wisconsin State University, LaCrosse; M.S., University of Colorado; Ph.D., University of Iowa
Professor of HPER: Physical Education
Director of the School of Health, Physical Education, and Recreation — 1960 (1979)

Gordon A. Timpany — B.Ed., Wisconsin State University, Whitewater; M.A., University of Minnesota
Assistant Professor of Business Education and Administrative Management — 1967

Abolghassem Tolu Honary — B.S., College of Higher Technical Teacher Training, Babol, Iran; M.S., Mankato State University; D.I.T., University of Northern Iowa
Assistant Professor of Industrial Technology — 1982 (1983)

***Thomas J. Tritle** — B.Mus., Baldwin-Wallace College; Teaching Certificate, South Dakota State University; M.Mus., New England Conservatory
Instructor in French Horn — 1980

Jean Ann Trout — B.S.Ed., Wittenberg University; M.A., Ball State University; Ed.D., Indiana University
Associate Professor of Education — 1970 (1976)

Roy D. Unruh — B.A., Bethel College; M.A., University of Minnesota; Ed.D., University of Northern Colorado
Associate Professor of Physics and Science Education — 1967 (1978)

- Dhirendra K. Vajpeyi** — Siddhantalankar, Arya Samaj, India; B.A., M.A., (English Literature), Lucknow University; M.A. (Public Administration), Lucknow University; M.A., Ph.D., Michigan State University
Professor of Political Science — 1969 (1979)
- Sidney S. Vander Werf** — B.A., Calvin College; M.F.A., Michigan State University
Assistant Professor of Art — 1983
- Marjorie Fay Fink Vargas** — B.S., M.S., University of Wisconsin
Assistant Professor of Teaching: Language Arts — 1964 (1970)
- Jeffrey W. Vermeer** — B.S., M.B.A., University of Nebraska; C.P.A.
Assistant Professor of Accounting — 1982
- Ann S. Vernon** — B.A., M.A., Ph.D., University of Iowa
Associate Professor of Education — 1973 (1982)
- Nile D. Vernon** — B.A., Central College, Iowa; M.A., University of Nebraska; Ph.D., University of Iowa
Associate Professor of Spanish — 1966 (1976)
- Francis D. Vilmain** — B.A., University of Northern Iowa; M.S., University of Wisconsin
Associate Professor of Physics — 1965 (1974)
- Rita Voltmer** — B.A., Tarkio College, Missouri; M.S., Northwest Missouri State University; Ph.D., Kansas State University
Assistant Professor of Teaching: Science — 1980
- Paul J. Waack** — B.S., University of Dubuque; M.A., University of Iowa
Instructor of Teaching: Physical Education — 1982
- William L. Waack** — B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Associate Professor of Teaching: Language Arts — 1977 (1983)
- David J. Walker** — B.S., Missouri Valley College; M.A., Louisiana State University; Ph.D., University of Wisconsin
Professor of History — 1975 (1983)
- Julia Elizabeth Wallace** — B.S., State University of New York, Oswego; M.A., Ph.D., State University of New York, Binghamton
Associate Professor of Psychology — 1978 (1983)
- Robert James Waller, Jr.** — B.A., M.A., University of Northern Iowa; D.B.A., Indiana University
Professor of Management
Dean of the School of Business — 1968 (1980)
- Stanley J. Walljasper** — B.A., M.S., Ph.D., University of Iowa
Associate Professor of Computer Science — 1975
- John Walsh** — B.A., Black Hills State College; M.A., University of South Dakota
Instructor of Radio-Television — 1983
- Linda L. Walsh** — B.S., University of Illinois, Chicago Circle; M.A., Ph.D., University of Chicago
Associate Professor of Psychology — 1975 (1980)
- James C. Walters** — B.A., Grand Valley State College, Michigan; M.Phil., Ph.D., Rutgers — The State University of New Jersey
Associate Professor of Geology — 1975 (1982)
- André Walther** — B.A., University of Northern Iowa; M.A., Michigan State University
Assistant Professor of French — 1964
- Robert J. Ward** — University of Akron; M.A., Ohio State University; Ph.D., University of Missouri
Professor of English — 1963 (1974)
- Robert T. Ward** — B.A., Amherst College; M.A., Ph.D., Harvard University
Associate Professor of Physics and Science Education — 1975
- S. Elvon Warner** — B.S., M.S., Brigham Young University; Ed.D., Arizona State University
Professor of Business Education
Head of the Department of Business Education and Administrative Management — 1975
- Robert P. Washut** — B.Mus., M.Mus., Arizona State University
Assistant Professor of Jazz Studies — 1980
- John F. Wedman** — B.S., M.Ed., Ph.D., University of Oklahoma
Assistant Professor of Education — 1981
- Judy M. Billen Wedman** — B.S., M.S., Central State University, Oklahoma; Ph.D., University of Oklahoma
Assistant Professor in Teaching
Coordinator of Student Teaching — 1981 (1982)
- Carl O. Wehner** — B.A., M.A., University of Northern Iowa
Assistant Professor of Computer Science — 1961 (1966)
- Wanda P. Wehner** — B.A., M.A., University of Northern Iowa
Assistant Professor of Chemistry — 1966 (1971)
- James D. Welch** — B.S., M.Ed., University of Missouri
Associate Professor of Teaching: Music — 1962 (1972)
- Joel W. Wells** — B.S., Ohio University; M.A., Western Carolina University; Ph.D., University of Connecticut
Assistant Professor of Home Economics — 1981
- Donald B. Wendt** — B.Mus., Northwestern University; M.A.Ed., University of Northern Iowa
Associate Professor of Woodwinds — 1958 (1969)
- Peter J. Wetterlind** — B.S., University of Minnesota, Duluth; M.S.T., University of Wisconsin, Superior; M.S., Ph.D., University of Arizona
Assistant Professor of Computer Science — S. 1982
- Michael R. White** — B.S., Northern Illinois University; M.A.Ed., University of Georgia; Ph.D., The Ohio State University
Professor of Industrial Technology — 1979
- Donald R. Whitnah** — B.A., M.A., Ph.D., University of Illinois, Urbana
Professor of History
Head of the Department of History — 1959 (1969)
- David A. Whitsett** — B.A., Pennsylvania State University; M.S., Ph.D., Case Western Reserve University
Professor of Psychology — 1974 (1979)
- Paul D. Whitson** — B.S., M.S., Baylor University; Ph.D., University of Oklahoma
Professor of Biology — 1972 (1981)
- Melba Rae Widmer** — B.A., M.A., University of Iowa
Assistant Professor of Home Economics — 1979
- Donald E. Wiederanders** — B.S., Wartburg College; M.A., University of Minnesota
Professor of Teaching: Mathematics — 1958 (1975)
- Russell A. Wiley** — B.A., M.A., University of Northern Iowa
Assistant Professor of Chemistry — 1967 (1971)
- Jack D. Wilkinson** — B.A., M.A., University of Northern Iowa; Ph.D., Iowa State University
Professor of Mathematics — 1962 (1975)
- Ruth E. Williams** — B.Mus., M.Mus., Indiana University
Instructor of Voice — 1983
- James M. Wilmesmeier** — B.A., St. John's University, Minnesota; M.A., Washington University, St. Louis; Ph.D., University of Iowa
Assistant Professor of Management — 1976

- Barry J. Wilson** — B.A., Immaculate Conception Seminary; M.S., Creighton University; Ph.D., University of Missouri
Associate Professor of Education — 1973 (1980)
- Hoyt G. Wilson** — B.S., Stanford University; M.S., M.B.A., Michigan State University; Ph.D., The Pennsylvania State University
Associate Professor of Management — 1977 (1979)
- Neil B. Wilson** — B.S., Louisiana Technical University; M.S., University of Missouri
Associate Professor of Marketing
Director of the Management Development Facility — 1982
- Nixon A. Wilson** — B.A., Earlham College; M. Wildlife Management, University of Michigan; Ph.D., Purdue University
Professor of Biology — 1969 (1975)
- *Robley C. Wilson, Jr.** — B.A., Bowdoin College; M.F.A., University of Iowa
Professor of English
Editor of *North American Review* — 1963 (1975)
- Francis J. Winter** — B.A., University of Dubuque; M.A., Ph.D., University of Iowa
Assistant Professor of Political Science — 1965
- Harold B. Wohl** — B.A., M.A., Ph.D., University of Iowa
Professor of History — 1956 (1969)
- Joanne Wolfe** — B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education — 1967 (1973)
- Ching S. Woo** — B.A., Cornell University; M.S., University of Michigan; Ph.D., University of Kentucky
Professor of Chemistry — 1967 (1978)
- Duane Wood** — A.A., Rocky Mountain School of Art, Colorado
Adjunct Instructor in Art — 1979
- Evelyn F.S. Wood** — A.B., Marshall University; M.A., University of Michigan
Associate Professor of English — 1966 (1974)
- Dennis R. Wubben** — B.B.A., University of Iowa; M.A., University of Northern Iowa; Ed.D., University of Minnesota
Assistant Professor of Marketing and Business Education — 1980
- Robert W. Wyatt** — B.A., University of Northern Iowa; Ph.D., University of Iowa
Assistant Professor of Management — 1980
- Barbara Yager** — B.S., M.A., The Ohio State University; Ed.D., University of Southern California
Professor of Physical Education
Coordinator of Physical Education Division — 1949 (1969)
- Brenton M. Yarnal** — A.B., University of California, Davis; M.Sc., University of Calgary; Ph.D., Simon Fraser University
Assistant Professor of Geography
- Jack G. Yates** — B.A., University of Arkansas; M.A., Ph.D., The Johns Hopkins University
Associate Professor of Psychology — 1975 (1980)
- H. Marcus Yoder** — B.A., Bethel College, Kansas; M.A., Ph.D., University of Iowa
Associate Professor of Teaching: Elementary Education — 1971 (1982)
- Mahmood Yousefi** — B.A., California State University; M.A., Ph.D., University of California, Santa Barbara
Associate Professor of Economics — 1981
- George K. Zucker** — B.A., Queens College, New York; M.A., Ph.D., University of Iowa
Professor of Spanish — 1968 (1974)

Librarians

- Donald O. Rod** — A.B., Luther College; A.B.L.S., University of Michigan
Director of Library Services
Professor of Library Science — 1953 (1966)
- H. Wendell Alford** — B.A., John B. Stetson University; B.D., Southwestern Baptist Theological Seminary; B.S.L.S., North Texas State University
Assistant Director of Library Services (Technical Services)
Associate Professor — 1959 (1967)
- Tieh-Cheng Chin** — B.A., National Northeastern University, China; M.A., M.L.S., University of Washington; A.M.L.S., Florida State University
Order Librarian and Associate Professor — 1971 (1978)
- Eleanor Bostwick Crownfield** — B.A., Smith College; M.S.L.S., Simmons College
Catalog Librarian and Assistant Professor — 1964 (1977)
- Donald W. Gray** — A.N., Asbury College; B.D., Emory University; M.A.L.S., University of Minnesota
Assistant Director of Library Services (Public Services)
Associate Professor — 1967 (1975)
- Douglas M. Hieber** — A.B., Cornell College; M.S.L.S., University of Illinois
Head of Circulation and Associate Professor — 1967 (1977)
- Thomas L. Kessler** — B.G.S., M.A.L.S., M.B.A., University of Iowa
Reference Librarian and Instructor — 1983
- Lawrence W. Kieffer** — B.A., M.A.L.S., University of Minnesota
Head of Reader Service and Associate Professor — 1969 (1977)
- Lucille J. Lettow** — B.A., University of Northern Iowa; M.A., University of Missouri
Youth Collection Librarian and Instructor — 1980
- Stanley P. Lyle** — B.A., University of Northern Iowa; M.A.L.S., University of Iowa; M.B.A., University of Northern Iowa
Reference Librarian and Instructor — 1977
- Fred Y.M. Ma** — B.L.L., Sun Yat-sen University, China; M.A., B.S.L.S., University of Minnesota
Head of Cataloging and Associate Professor — 1960 (1968)
- Jessica A. Marshall** — B.S., Grove City College; M.L.S., University of Pittsburgh
Head of Acquisitions and Assistant Professor — 1978 (1983)
- Katherine F. Martin** — A.B., Douglas College, Rutgers; M.S.L.S., M.A., University of North Carolina
Order and Bibliographic Control Librarian and Instructor — 1982
- Gretchen M. Myers** — B.A., University of Iowa; M.A.L.S., Rosary College, Illinois
Reference Librarian and Assistant Professor — 1967 (1972)
- Judy Lee Myers** — B.A., University of Iowa; M.A.L.S., University of Wisconsin
Catalog Librarian and Assistant Professor — 1967 (1975)
- Gerald L. Peterson** — A.B., A.M., M.S.L.S., University of Illinois
Reference and Special Collections Librarian and Assistant Professor — 1974 (1978)
- Verna Ford Ritchie** — B.A., Hunter College; M.A., McGill University; M.A.L.S., University of Michigan
Art and Music Librarian and Associate Professor — 1966 (1973)
- Barbara E. Savage** — B.S., Iowa State University; M.A., University of Iowa
Reference Librarian and Instructor — 1981
- Edward F. Wagner** — B.S., University of Wisconsin; B.S., Wisconsin State College, Eau Claire; M.A.L.S., University of Wisconsin
Reference Librarian and Associate Professor — 1958 (1978)
- Patrick J. Wilkinson** — B.A., M.A., Drake University; M.L.S., Indiana University
Documents and Maps Librarian and Assistant Professor — 1980 (1983)

Index

A

- Absences, 34
- Abstract of dissertation
 - Filing of, 179
- Abstract of thesis, 154
- Academic Advising, 9
- Academic Computing Service, 16-17
- Academic fees, 31
- Academic Load, 33
 - Certification, 30, 155
 - Extension students, 30, 36
- Academic Program Load
 - Graduates, 153
 - Undergraduates, 33
- Academic Suspension, 35
- Accident and Sickness Insurance, 10
- Accounting
 - Courses of instruction, 49
 - Graduate program, 170
 - Staff, 49
 - Undergraduate major and/or minor, 49
- Accreditation of the university, 5
- Activities
 - Music, 13, 121
 - Physical Education, 13, 86
 - Recreation, 13
 - Speech/Theatre, 13, 14
- Administration, Veterans, 31, 151
- Administrative Officers, 185
- Administrative Staff, 185-191
- Admission Policies and Procedures, 23, 148
 - Application for, 23, 149
 - Health and Housing forms, 23
 - Tests and Interviews, 23, 149
 - Transfer students, 25-26, 153
 - Transcripts, 23, 153
- Admissions,
 - Candidacy for
 - Doctor of Education degree, 178
 - Doctor of Industrial Technology degree, 182
 - Master's degree programs, 152
 - Specialist's degree programs, 174
 - Cooperative Doctoral Programs in Educational Administration, 184
 - Graduate students, 27, 148
 - Initial Admission (Doctor of Education), 178
 - Medical Technology, 40-41
 - Nursing programs, 41
 - Preparation for admission, 24
 - Provisional (graduate), 181
 - Resident and Non-resident Classification, 27
 - Standards, Regents General, 25
 - Teacher Education program, 24, 142
 - Tests, 23, 152
 - Transfer students, 25, 153
 - Undergraduate students, 24
- Admissions, Office of, 23
- Adult Education, 20-21
- Advanced Placement Program, 20
- Adviser and/or counselor,
 - Graduate, 9, 18, 150, 152
 - Undergraduate, 9, 10, 17
- Adviser, Foreign Student, 19
- Advising, Academic, 9
- Advisory Committee, Faculty
 - Doctor of Education, 178
 - Doctor of Industrial Technology, 182
- Alumni Association, 21
- Alumni Scholarship, general, 12
- Alumni Services and Development
 - Staff, 190
- Alumnus, The*, 21
- American Chemical Society, 5
- American Association of Colleges for Teacher Education (AACTE), 5
- American Association of Collegiate Registrars and Admissions Officers, 5
- American Association of School Administrators, 174
- American College Tests, 23
- American Home Economics Association, 5
- American Speech-Language and Hearing Association, 5
- American Studies major, 145
- Anthropology
 - Courses of instruction, 138
 - Undergraduate programs, 137
- Application fee (for admission), 23
- Application for admission to
 - Candidacy for
 - Cooperative Doctoral Program in Education Administration, 184
 - Doctor of Education degree, 178
 - Doctor of Industrial Technology degree, 182
 - Master's degrees, 152
 - Specialist's degrees, 174
 - Graduate study, 148
 - Undergraduate study, 24
- Application for Room in Residence Hall, 9
- Army Reserve Officers' Training Corps (AROTC), 41, 111
- Scholarships, 111
- Art
 - (Bachelor of Arts and Bachelor of Fine Arts programs)
 - Courses of instruction, 50
 - Graduate program, 156
 - Scholarships, 12
 - Staff, 50
 - Undergraduate majors and/or minors, 50
- Art, Gallery of, 15
- Artists Series, 14
- Asian Studies major and/or minor, 145
- Assitant, Resident, 9
- Assistantships, graduate and teaching, 151
- Athletics, 13
- Athletics, Grants-in Aid, 12
- Athletics, Intercollegiate, 13
 - Staff, 190
- Attendance,
 - Class, 34
 - Commencement, 155, 180, 183
- Audiology, courses in, 66
 - Graduate program, 156
- Audio-Production Services, 16
- Audio-Visual Instruction, 16
- Audio-Visual Services Area, 16
- Audit (see also: Visitor), 37
 - Fee, 37

Awards and Scholarships, 11-12

Literature Search and Computer Use (or Bibliographic Search Awards), 154

B

Bachelor's degree programs

Curricula, 39

General Education requirements, 42

Second, 29

Bachelor of Arts degree, 39

Majors and minors, 45

Bachelor of Arts — Teaching Program, 43

Additional requirements, 43

Majors and minors, 44

Bachelor of Fine Arts degree, 45

Bachelor of Liberal Studies degree, 46

Bachelor of Music degree, 46

Bachelor of Technology degree, 46

Bands, concert and marching, 13

Batch Computing, 16

Billing (fees), 32

Biology

Courses of instruction, 53

Graduate program, 156

Lakeside Laboratory courses, 55

Staff, 52

Undergraduate majors and/or minors, 52

Board and Room, 9, 32

Refunds for, 9, 32

Board of Regents, State, 185

Books and Supplies, approximate cost and availability, 9

Broadcasting Services

Staff, 186

Business and Behavioral Research, Center for, 185

Business, School of

Dean of the School, 185

Departments, 8

Graduate programs, 170

Business Administration, Master of, 170

Business Education and Administrative Management

Courses of Instruction, 57

Graduate programs, 156, 157

Staff, 56

Undergraduate majors and/or minors, 56

Business Services

Staff, 140

C

Calendar, University, 4

Campus, Description of, 6

Map, 3

Campus Recreation, 13

Campus tours, 10

Cancellation of Registration, 33

Candidacy, Graduate

Admission to, 148, 152, 156-165

Requirements for, 149, 153, 156-165

Card, I.D. (identification card), 33

Student Spouse, 10

Career Services, Counseling and, 10

Staff, 188

Century, The, 21

Certificates, Program, 38

Certificates, Teaching, 30

College recommendation, 152

For approval in various graduate majors, 156

In other states, 30, 156

Iowa Community College, 155

Prerequisite for graduate degree, 148, 174

Reinstatement, 30

Renewal, 30

Residence, credit and minimum time, 30

Temporary, 30

Chamber Music Series, 14

Change of Degree Program, 42

Change of Registration

Fee, 33

Chemistry

Courses of instruction, 59

Graduate program, 157

Staff, 58

Undergraduate majors and/or minors, 58, 59

Classification of students, 27

Clinics (see: Education, Learning Skills Center, Speech and Hearing)

Colleges and Departments, 5, 6, 7, 8

College-Level Examination Program (CLEP), 20, 37

Fees, 37

College Student Personnel Services

Majors in, 169

Commencement attendance, 155, 182

Common Professional Sequence (undergraduate), 43

Common Numbers, 48

Common Regulations and Requirements, Master's degree programs, 152

Commons, The, 15

Communication and Theatre Arts

Applied (speech), 62

Courses of instruction, 62

Graduate program, 157

Staff, 60

Undergraduate majors and/or minors, 60, 61

Communicative Disorders

Courses of instruction, 66

Graduate programs, 156, 163

Staff, 65

Undergraduate major, 65

Community classes, 20, 21

Fee, 31

Comprehensive examinations, 150, 152, 154, 159, 161, 162, 164, 175, 182

Computer Science, 105

Computer use, awards for, 154

Computing Services, Academic

Staff, 186

Concert Chorale, 13

Conditional (provisional) admission to graduate study, 27, 149, 181

Conduct, student, 38

Conferences, Workshops, and Exhibits, 20, 21

Conservation Camp, Iowa Teachers, 18

Consultative service, 20, 21

Contents, Table of, 2

Continuing Education and Special Programs, Division of, 186

Dean of, 185

Cooperative Doctoral Program, 184

Cooperative Education Program

Courses in, 11

Cooperative Nursing-Medical Technology Programs, 41

Coordinator of Academic Advising, 188

- Correspondence study, 20
 - Cost for
 - Board and room, 32
 - Books and supplies, 32
 - Counseling: Advising Services for Adults, 10
 - Counseling Services, 10
 - Staff, 188
 - Counselor (See: Adviser)
 - Course numbers, change of, 153
 - Courses
 - Descriptions, 49-144
 - Dropping and adding, 32, 33
 - Levels, 48, 151
 - Numbers common to many departments, 48
 - Transfer adjustment of, 26
 - Credit
 - Activities, 26, 86
 - Applied, 41, 62
 - By examination, 36
 - Community class, 36
 - Correspondence, 20, 36
 - Credit/No-Credit, 35
 - Evening class, 20
 - Extension class, 36
 - Independent study, 36
 - Loss of, 34
 - Maximum, 29
 - Non-thesis plan, 153
 - Recency of, 153
 - Residence, 29, 154, 175, 179, 182
 - Research, 154, 179, 183
 - Saturday, evening, and short-term classes, 20, 153
 - Second Baccalaureate degree, 29
 - Student teaching, 29
 - Study abroad, 18
 - Study tours, 18
 - Transfer, 26
 - Workshops, 38
 - Credit by Examination, 36
 - Fee, 37
 - Maximum for graduation, 29
 - Credit/No-Credit grading, 35
 - Criminology and Corrections, 137
 - Cultural opportunities, 13, 14
 - Curricula
 - Adjustments for transfer students, 26
 - General Education, 42
 - Graduate
 - Cooperative Doctoral Program, 184
 - Doctor of Education program, 178
 - Doctor of Industrial Technology program, 181
 - Master of Arts program, 155
 - Master of Arts in Education program, 166
 - Master of Business Administration, 170
 - Master of Music program, 171
 - Second Master's degree program, 155
 - Specialist's degree programs, 173, 174
 - Undergraduate
 - Bachelor of Arts, 39
 - Bachelor of Arts — Teaching program, 40
 - Bachelor of Fine Arts, 41
 - Bachelor of Liberal Studies, 42
 - Bachelor of Music, 42
 - Bachelor of Technology, 42
 - Other programs, 41
 - Cooperative programs, 41
 - Joint programs, 40
 - Pre-professional (or joint) programs, 40
 - Curriculum and Instruction
 - Courses of Instruction, 69
 - Graduate programs, 166, 174
 - Staff, 67
 - Subject fields
 - Elementary, 67
 - Middle School/Junior High, 68
 - Undergraduate majors and/or minors, 67, 68
 - Curriculum Laboratory, 15
- D**
- Dean of Continuing Education and Special Programs, 185
 - Dean of the College of Education, 185
 - Dean of the College of Humanities and Fine Arts, 185
 - Dean of the College of Natural Sciences, 185
 - Dean of the College of Social and Behavioral Sciences, 185
 - Dean of the Graduate College, 185
 - Dean of the School of Business, 185
 - Dean's list, honors, 35
 - Debate, awards and scholarships, 12-14
 - Honor organizations, 14
 - Declaration of Major, 33
 - Degree requirements for
 - Bachelor of Arts, 40
 - Bachelor of Arts — Teaching program, 39
 - Bachelor of Fine Arts, 41
 - Bachelor of Liberal Studies, 42
 - Bachelor of Music, 42
 - Bachelor of Technology, 42
 - Change in, 42
 - Doctor of Education, 180
 - Doctor of Industrial Technology, 183
 - Master of Arts, 152-155
 - Master of Arts in Education, 152-155
 - Master of Business Administration, 170
 - Master of Music, 171
 - Second Baccalaureate degree, 29, 42, 150
 - Second Master's degree, 155
 - Special in Education, 42, 148, 174, 178
 - Specialist, 42, 148, 174
 - Degree status, 149, 181
 - Degree student, 149-150
 - Departments, 5-8
 - Courses of instruction, 48-144
 - Department of Public Instruction, Iowa, 30, 143, 155
 - Dining Services, 9
 - Directed Experience, 44
 - Director of
 - Admissions, 188
 - Counseling, 188
 - Financial Aid, 188
 - Gallery of Art, 187
 - Health Service, 189
 - Housing, 188
 - Information Service and Publications, 191
 - Library Services, 185
 - Discrimination (Non-) Policy, 38
 - Dissertation, 179
 - Distributive Education Teacher-Coordinator, 56
 - Doctoral Program in Educational Administration,
 - Cooperative, 184

Doctor of Education

- Academic load, 179
- Admission, application for, 178
- Admission to candidacy, 178
- Admission, types of,
 - Degree status, 178
 - Provisional degree status, 178
- Advisory Committee, Faculty, 179
- Application for graduation, 179
- Areas of Intensive Study,
 - Counseling, 178
 - Curriculum and Instruction, 178
 - Educational Administration, 178
 - Reading, 178
 - School Psychology, 178
 - Special Education, 178

Attendance at commencement, 180**Credit,**

- Recency, 178
- Residence, 179
- Transfer, 178

Department committee, 179**Dissertation**

- Abstract of, 179
- Examination, 179
- Fees for, 179
- Filing of, 179
- Manual, 179
- Proposal, 179

Examinations

- Comprehensive Examination, 179
- Dissertation Examination, 179
- Graduate Record Examination, 178

General Regulations, 178**Graduation**

- Application for, 179
- Attendance at Commencement, 180

Level of courses, 179

- Microfilm agreement, 179
- Program requirements, 180
- Scholarship requirements, 178
- Time limitation, 179

Doctor of Industrial Technology

- Academic load, 181
- Admission, application for, 181
- Admission to candidacy, 182
- Admission, types of,
 - Degree status, 181
 - Provisional degree status, 181
- Advisory Committee, Faculty, 182
- Application for graduation, 183
- Attendance at commencement, 183
- Credit,
 - Recency, 182
 - Required for graduation, 183
 - Residence, 182
 - Transfer, 182

Department committee, 182**Dissertation,**

- Abstract of, 183
- Examination, 183
- Fees for, 183
- Filing of, 183
- Manual, 182

Examinations, 182

- Graduate Record Examination, 182
- Departmental Candidacy, 182
- Comprehensive, 183
- General Regulations, 182
- Graduation Requirements, 183
- Level of courses, 182
- Microfilm agreement, 183
- Program requirements, 183
- Publication, 183
- Research, 183
- Scholarship requirements, 183

Dormitories (see: Residence Halls)**Double major, 29****Dramatics**

- Courses (see: Communication and Theatre Arts)
- Extracurricular activities, 13

Dropping courses, 33**E****Early Childhood teaching, 67****Earth Science**

- Courses of instruction, 72-74
- Graduate program, 158
- Staff, 72
- Undergraduate majors and/or minors, 72

Economics, 74

- Courses of instruction, 74-75
- Staff, 74
- Undergraduate majors and/or minors, 74

Education, College of

- Dean of the College, 185
- Departments, 6

Educational Administration and Counseling

- Courses of instruction, 75
- Graduate programs, 174
- Staff, 75

Educational and Student Services

- Division of, 187
- Vice-President for, 187

Education Clinic, The, 17

- Director of, 206

Educational Media Center, The, 16

- Audio-Production, 16
- Audio-Visual Services, 16
- Communications Center, 16
- Director of, 186
- Graphic and Photographic Services, 16
- Media Laboratory, 16
- Motion Picture Production, 16
- Television Services, 16

Education Media courses, 71**Educational Opportunity Grants, 11**
(see also: Pell Grants)**Educational Opportunity Programs and Special Community Services, 17, 18**

- Director of, 185
- Ethnic Minorities Cultural and Educational Center, 186
- Graduate Educational Opportunity Program, 186
- Staff, 186
- UNI Center for Urban Education (UNI-CUE), 17

Educational Psychology and Foundations

- Courses of instruction, 76
- Graduate programs, 167, 174
- Staff, 76

- Educational Services, University, 15
- Elementary Education, 67, 140, 167
- Emeritus Faculty, 192
- Employment of students, 11, 151
- Endorsements, 30, 156
- English Language and Literature, 5, 79
 - Courses of instruction, 80
 - Graduate programs, 158, 164
 - Staff, 79
 - Subject field, 80
 - Undergraduate majors and/or minors, 79, 83
- English/Modern Language programs, 83
- Enrollment and Registration, 31
- Environmental/Conservation Education, 18
- Environmental Planning, Emphasis in, 133
- Environmental Perceptions Minor, 147
- Ethnic Minorities Cultural and Education Center, 18
- Evening classes, 20, 153
- Examinations and/or Tests
 - Admission, 23, 25, 27, 148, 152
 - Advance Placement Program, 20, 37
 - College-Level Examination Program (CLEP), 20, 37
 - Comprehensive, 150, 152, 154
 - Credit, 29, 32, 35, 36
 - Entrance, 23, 26
 - Health, or physical, 23, 150
- Exchange Programs
 - National Student Exchange, 19
 - Regents Universities Student Exchange, 19
- Expenses (see Cost, and Fees)
- Extension
 - Classes, 20
 - Community classes (adult education), 20
 - Consultative services, 20
 - Continuing education, 20
 - Correspondence study, 20
 - Credit, 36
 - Fee, 36
 - Publications, 20
- Extracurricular activities, 13

F

- Facilities, University, 15
- Faculty
 - Emeritus, 192
 - Instructional, 195
 - Library, 209
- Failed courses, 34
- Family Student Housing, 9
- Fee exemption (awards, loans, scholarships), 11
- Fee payment billing, 32
- Fee payment receipt, 32
- Fees
 - Activity, 31
 - Advance, 32
 - Applications, 32
 - Basic, 31
 - Board and room, 32
 - Change of Registration, 33
 - College-Level Examination, 32
 - Correspondence study, 32
 - Credit by examination, 32
 - Dissertations, 183
 - Enrollment, 32

- Extension, 32
- Housing, 32
- Late enrollment, 32
- Music, applied, 32
- Non-resident, 31
- Partial load (per hour), 31
- Refunds, 32
- Reinstatement of enrollment, 32
- Summer Session, 31
- Thesis binding, 154
- Transcript, 32
- Visitor (audit), 31
- Workshops, 31
- Fees Schedule, 31
- Financial Aid, Student,
 - College Work Study, 11
 - Employment, 11
 - Grants (Pell, SEOG), 11
 - Loans (GSL, NDSL), 11
 - Scholarships, 12
- Financial Aids and Student Employment,
 - Staff, 188
- Food Services, 9
- Foreign Student Adviser, 19
- Foreign Student Program, 19
- Foreign Studies majors, 145
- Forensics, 13
- Foundation, UNI, 22
- Four-year Curricula, 39
- Fraternities, honor and social, 14
- French (see: Modern Languages)
- Further Work, Statement of, 33

G

- Gallery of Art, 15
- General Education
 - Objectives, 43
 - Requirements for, 42
- General Information, 9
- General Science, 133
- General Studies major, 20, 146
- General Studies major program for Registered Nurses, 40
- Geography,
 - Courses of instruction, 84
 - Graduate program, 159
 - Staff, 84
 - Undergraduate majors and/or minors, 84
- Geology (see: Earth Science)
- German (see: Modern Languages)
- Gifted, Education of, 167
- Government (see: Political Science)
- Government, Student, 14
- Grade Index, 35
- Grade Points
 - Requirements, 34
- Graduate
 - Admission to candidacy, 152, 178
 - Admission to study, 178, 181
 - Assistantships, 151
 - Certification and Endorsement, 156
 - Credit for undergraduate students, 37
 - Second master's degree, 155
 - Scholarships, 151

Study

- Admissions, 148
- Committees, 152, 178, 181
- Majors for
 - Doctor of Education program, 178
 - Doctor of Industrial Technology program, 181
 - Master of Arts program, 155
 - Master of Arts in Education program, 166
 - Master of Business Administration program, 170
 - Master of Music program, 171
 - Specialist in Education program, 174
 - Specialist program, 173

Graduate Center, Quad-Cities, 184

Graduate College

- Dean of the College, 185
- Staff, 187

Graduate Educational Opportunity Program, 17

Graduate Student Organization, 14

Graduate Thesis Research Awards, 154

Graduation

- Applications for, 29, 155, 174, 179, 183
- Requirements for
 - Bachelor's degrees, 29
 - Doctoral degrees, 180, 183
 - Master's degrees, 153
 - Specialist's degrees, 174
- With honors, 35

Grants, Educational, 11

(see also: Pell Grants)

Graphic and Photographic Services, 16

Guaranteed Student Loan, 12

H

Halls, Residence

- Directors, 188-189

Health examinations, 23, 152

Health, Physical Education, and Recreation, School of,

- Activities, 87
- Courses of instruction
 - Health, 88
 - Physical Education, 89
 - Recreation, 90

Graduate programs, 160, 162

Requirements for graduation, 86

Staff, 86

Undergraduate majors and/or minors, 86, 87

Health Service, Student

- Staff, 189

Hearing Clinic, speech and, 17

History

- Courses of instruction, 92
- Graduate program, 160
- Staff, 91
- Undergraduate majors and/or minors, 91

Holidays for

- Office personnel, 31
- Students, 4

Home Economics

- Courses of instruction, 95
- Graduate program, 160
- Staff, 94
- Subject field, 94
- Undergraduate majors and/or minors, 94, 95
- Vocational, 94

Honor organizations, 14

Honors, graduating with, 35

Hospital service, 10

Housing

- Applications for, 9, 23
- Contracts, 9, 23, 33
- Deposit, 9, 23 ?
- Director of, 188
- Family, 9
- Fees, 32
- Married Students, 9
- Occupancy regulations, 9
- Off-campus (food service), 9
- Residence halls, 9
- Units, men's and women's, 9

Humanities

- Director of, 144
- General Education requirements, 43
- Major and/or minor, 144
- Undergraduate courses, 144

Humanities and Fine Arts, College of, 7

Dean of the College, 185

Departments, 5, 7

Human Relations

- Courses in, 144
- Required for certification, 30

I

I.D. (identification card), 33

Student Spouse, 10

Incomplete (unfinished) work, 34

(see also: Research Continued)

Independent study, 19, 20, 36, 48, 82

Individual instruction, 36

Individual Studies Program

Individual study, 19, 20, 48

Major, 20, 146

Readings, 48

Seminar, 48

Industrial Education Exposition Scholarship, 12

Industrial Technology

(Bachelor of Arts and Bachelor of Technology programs) 48

Courses of instruction, 99

Graduate programs, 160, 181

Staff, 98

Subject field, 98

Undergraduate majors and/or minors, 98

Industrial Technology Degree, Doctor of, 181

Information services, 21

Institutes and Workshops, 20

Instruction, Division of, 185

Instructional staff, 195

Instrumental music, 120

Insurance, Student Health and Accident, 10

Intent to Register, Notice of, 31

Interactive Computing services, 16

Intercollegiate Athletics

Staff, 190

Interdisciplinary Courses and Programs

- American Studies major, 145
- Asian Studies major and/or minor, 145
- Environmental Perceptions minor, 147
- General Studies major, 146
- Humanities courses, 144

- Humanities major and/or minor, 144, 145
- Human Relations courses, 144
- Individual Studies major, 146
- Latin American Studies major, 146
- Russian Area Studies major, 146
- Women's Studies minor, 147

- Interest organizations, 14
- Intermediate Grade teaching, 68
- Interfraternity Council, 14
- International Student Program, 19
- Iowa Lakewide Laboratory, 18
- Iowa Professional Certificate, 155
- Iowa Community College program, 153
- Iowa State Department of Public Instruction, 30
- Iowa Teachers Conservation Camp, 18

J

- Joint Programs, 40
- Junior High School Education
(see: Middle School/Junior High Education major)

K

- KCRS (Campus radio station), 14
 - Broadcasting courses, 62
- KHKE/KUNI (FM radio station), 21

L

- Laboratory, Curriculum, 15
- Laboratory School, Malcolm Price, 17, 143
- Languages (see: Modern Languages)
- Language Arts, subject field, 80
- Late enrollment and registration,
 - Fee, 32
- Latin American Studies major, 146
- Learning Skills, Center,
 - Staff, 188
- Level of courses, 48, 151
- Liberal Arts curricula, 40-42
- Liberal Arts programs (see departmental listings)
- Liberal Studies, Bachelor of, 42
- Library, The University, 15
 - Director, 209
 - Staff, 209
- Library Science
 - Courses of instruction, 101
 - Graduate program,
 - Staff, 101
 - Teaching endorsement, 101
 - Undergraduate program, 101
- Linguistics, 80, 82, 155, 159
- Living accommodations, 9
- Load, academic, 33, 150, 182
- Loan funds, 11, 12, 151
- Lower Elementary teaching, 68, 139, 167

M

- Majors
 - Declaration of, 33
 - Graduate, 156, 166-177
 - Second or double, 29, 155
 - Undergraduate programs, 33, 39-47

- Making up of work, 34
- Malcolm Price Laboratory School, 17, 143
- Management
 - Courses of instruction, 102-104
 - Graduate program, 169, 170
 - Staff, 102
 - Undergraduate major and/or minor, 102

- Map of campus, 3

- Marketing
 - Courses of instruction, 104
 - Graduate program, 170
 - Staff, 104
 - Undergraduate major and/or minor, 104

- Marks and Grade Points, 34

- Master's Degrees Common Regulations and Requirements, 152

- Master's degree programs
 - Master of Arts, 155
 - Master of Arts in Education, 166
 - Master of Business Administration, 170
 - Master of Music, 171

- Mathematics and Computer Science, 105
 - Courses of instruction, 106
 - Graduate programs, 161
 - Staff, 105
 - Subject field, 107
 - Undergraduate majors and/or minors, 106

- Maucker Union, 15

- Media Laboratory, Educational, 16

- Medical Service, 10

- Medical Technology,
 - Allen Memorial School of, 40
 - Schoitz School of, 40

- Medicine, 40

- Merchant Scholarship, 12

- Microfilm agreement, 183

- Middle School/Junior High School Subject Field major, 68

- Military Science
 - Courses of instruction, 111
 - Program, 41, 111
 - Staff, 111

- Minority Group Education
 - Director, 185
 - Staff, 186

- Minors, 44, 45

- Modern Languages
 - Courses of instruction, 112-118
 - English/Modern Language programs, 83
 - Graduate programs, 158-160, 163, 164-165
 - Staff, 112
 - Subject field, 113
 - Undergraduate majors and/or minors, 112-113

- Motion Picture Production, 16

- Museum, University, 15

- Music, School of, 5, 118
 - (Bachelor of Arts, Bachelor of Fine Arts, and Bachelor of Music degrees)
 - Activities, 120, 121
 - Applied credit, 121
 - Courses of instruction, 120
 - Graduate programs, 161, 171
 - Participation credit, 119, 121
 - Special fees, 31
 - Staff, 118
 - Undergraduate majors and/or minors, 118
- Music, Master of, degree, 171
- Music organizations, 121

N

- National Association of Schools of Music, 5
- National Council for the Accreditation of Teacher Education (NCATE), 5, 27
- National Direct Student Loan, 11
- National Student Exchange, 19
- National University Extension Association, 5
- Natural Sciences, College of
 - Dean of the College, 185
 - Departments, 187
- New student orientation, 10
- Non-degree status, 149
- Non-degree student, 149
- Nondiscrimination Policy, 38
- Non-resident Classification, 27
- Non-thesis plan, 153
- North American Review*, 6
- North Central Association of Colleges and Secondary Schools (NCA), 5
- Notice of intent to register, 31
- Numbering of areas, departments, and courses, 48
- Nurses, General Studies major for Registered Nurses, 40
- Nursing, Allen Memorial School of, 41
- Nursing, University of Iowa, 41

O

- Objectives, University, 5
- Occupancy of residence halls, 9
- Off-campus housing, 9
- Office Education Teacher-Coordinator, 56
- Office hours and holidays, 31
- Officers of Administration, 185
- Open credit system, 36
- Organization by semesters, 31
- Organizations, Student, 13, 14
- Orientation and Counseling, student, 10
- Outline for Organization and Requirements for Master's Degrees, 172
- Overloads (see: Credit, Maximum)

P

- Panhellenic, 19
- Partial fee exemptions (Student Aid Scholarships and Graduate Assistantships), 12, 151
- Part-time employment, 151
- Pass/No credit (see: Credit/No Credit)
- Pell Grants, 11
- Philosophy and Religion
 - Courses of instruction, 125
 - Staff, 124
 - Undergraduate majors and/or minors, 124, 125
- Physical Education (see: School of Health, Physical Education, and Recreation)
- Physical Therapy, 40
- Physics
 - Courses of instruction, 127
 - Graduate program, 162
 - Staff, 126
 - Undergraduate majors and/or minors, 126, 127
- Placement
 - Staff, 188
- Placement tests, 23

Political Science

- Courses of instruction, 129
- Graduate program, 162
- Staff, 128
- Undergraduate majors and/or minors, 128, 129
- Practicum, 48
- Preparation for Admission (high school course work), 24
- Pre-professional curricula or programs, 40
- President of the University, 185
- Pre-Theological Emphasis, 124
- Price Laboratory School, 17, 143
- Probation
 - Graduate students, 150
 - Transfer students, 26, 35
 - Undergraduate students, 25, 35
- Professional Certificate, 30, 155
- Professional cores (graduate), 153
- Professional semester, 67, 166
- Professional Sequence, Common (undergraduate), 43
- Program Certificates, 38
- Program of study, 152
- Provisional admission (graduate), 149
- Provisional degree student, 149, 178
- Provisional status, 149, 178
- Provost, Vice-President and, 185
- Psychiatric referral, 10
- Psychology,
 - Courses of instruction, 131
 - Graduate program, 162
 - Staff, 131
 - Undergraduate majors and/or minors, 131
- Psychology, Educational, 76
- Public Administration major, 129
- Public Information Services, Office of, 21
 - News Information Services, 21
 - Staff, 191

Q

- Quad-Cities Graduate Center, 148

R

- Radio and Television Education and Service, 16
- Radio-Television Class Credit, 61
- Rates, Room and Board, 9, 32
- Reading
 - Courses in, 70
 - Majors in, 69
- Readings, 48
- Reading, Speaking, and Writing competency requirements, 24, 29
- Readmission, 35
- Records, Student, 38
- Recreation, 87
- Refunds, 33
- Regents, State Board of, 185
- Regents Universities Student Exchange Program, 38
- Registration (see: Enrollment and Registration)
- Registration certificate, 34
- Registration Procedure
 - New students, 31
 - Former students, 31
 - Graduate students, 31
 - Notice of intent to register, 31
- Rehabilitation testing, vocational, 9

- Reinstatement of certificates, 30
- Reinstatement of enrollment (fee), 32
- Religion, Philosophy and, 124
- Religious activities, 13
 - Organizations, 13
- Renewal of certificates, 30
- Repeating work, 35
- Research
 - Graduate credit on
 - Doctoral degree program, 178, 183
 - Master's degree programs, 154
 - Specialist's degree programs, 174
 - Undergraduate credit in many departments, 48
- Research, Continued, 34
- Residence credit
 - Graduate programs, 151, 175, 179, 182
 - Undergraduate programs, 29
- Residence Halls,
 - Application for rooms, 9
 - Advance deposits for rooms, 9
 - Contracts, 9
 - Deposit refunds, 9
 - Men's, 9
 - Occupancy of rooms, 9
 - Rates and payments, 9, 32
 - Resident assistant, 9
 - Women's, 9
- Residence for married students, 9
- Resident-Nonresident Classification, 27.
- Resident Assistant, 9
- Room and Board
 - Options for, 9, 32
 - Refunds, 9, 32
- ROTC, 41, 111
- Russian (see: Modern Languages)
- Russian Area Studies major, 146

S

- Safety Education, undergraduate program
 - Courses of instruction, 72
 - Major and minor, 72
- Saturday, evening, and short-term classes, 20
- Scholarships and awards, 12, 151
- School Business Management, 169
- School Journalism, 83
- School of Business
 - Dean of the School, 185
 - Departments, 8
 - Scholarships and grants, 12
- Science and Science Education, 133
 - Courses of instruction, 134
 - Graduate programs, 162
 - Subject field, 133
 - Undergraduate majors and/or minors, 133
- Science Education (Specialist's degree), 173
- Science Symposium Award, 12
- Second Baccalaureate degree, 29
- Second Master's degree, 155
- Secondary School Teaching
 - Majors and minors, 44
- Secondary teacher's curricula, 43-44
- Secretarial, 56
- Semesters, organized by, 31
 - Professional, 67

- Senate, Student (UNISA), 14
- Sequence, Common Professional (undergraduate), 43
- Short-term classes, 20
- Sixth-year program, 173, 174
- Social and Behavioral Sciences, College of, 8
 - Dean of the College, 185
 - Departments, 8
- Social Foundations of Education
 - Courses in, 78
- Social Life and Cultural Opportunities, 13
- Social organizations, 14
- Social Science, 135
 - Courses of instruction, 135
 - Graduate program, 163
 - Subject field, 135
 - Undergraduate majors and/or minors, 135
- Social Work
 - Courses of instruction, 135
 - Staff, 135
 - Undergraduate major, 135
- Sociology and Anthropology
 - Courses of instruction, 136
 - Graduate program, 163
 - Staff, 136
 - Undergraduate majors and/or minors, 136
- Sororities, honor and social, 13
- Spanish (see: Modern Languages)
- Speaking, Reading, and Writing competency requirements, 24, 29
- Special area studies, 144
- Special Education
 - Courses of instruction, 141
 - Graduate programs, 169
 - Staff, 139
 - Undergraduate programs, 139
- Specialist degree programs, 173
- Specialist in Education degree programs, 174
- Speech (see: Communication and Theatre Arts)
- Speech and Hearing Clinic, 10, 17
- Speech Pathology and Audiology (see: Communicative Disorders)
- State Board of Public Instruction, 30, 143
- State Board of Regents
 - Establishment of scholarships, 12
 - Fees subject to change, 31
 - Governs, 6
 - Membership, 185
- Statement of Further Work, 33
- Student Policy Handbook, The*, 38
- Student concerts, 13, 14
- Student conduct, 38
- Student costs, 31
- Student Counseling
 - Graduate programs in, 169
- Student fees (see: Fees), 31
- Student Field Experience
 - Courses of instruction, 143
 - Staff, 142
 - Student teaching, 143
- Student Financial Aid
 - Employment, 11
 - Loans and Grants, 11, 12
 - Scholarships and awards, 12
- Student Government, 14
- Student Health Service, 10
- Student Housing, 9
 - Accommodations for family housing, 9
- Student loan funds, 11, 12

- Student newspaper, 14
- Student organizations, 13, 14
- Student orientation, 10
- Student Persistence, 38
- Student Personnel Services programs, 169
- Student Publications
 - Board of Control, 14
- Student Records, 38
- Student Senate, 14
- Student Services, Division of Educational and,
 - Vice-President for,
- Student Spouse Activity Program, 10
- Student Services
 - Academic Advising, 9
 - Career Services, 10
 - Cooperative Education, 11
 - Counseling Services, 10
 - Learning Skills Center, 11
 - Orientation programs, 10
 - Campus tours, 10
 - Placement Services, 11
 - Speech and Hearing Clinic, 10, 17
 - Student Health Service, 10
 - Student Spouse Activity Program, 10
 - Student Teaching
 - Aim, 142
 - Application, 30, 142
 - Approval, 44
 - Areas, 142
 - Certification requirements, 30
 - Credit, 29
 - Directed Experience, 44, 142
 - Double majors, 44, 142
 - Limitations in the amount, 44, 142
 - Prerequisites, 43, 142
 - Scholarship requirement, 44
 - Time spent (block of time), 44
 - Transfer credit, 29, 142
 - Study Abroad, 18
 - Study Tours, 18
 - Summer sessions, 31
 - Supplies and books, approximate cost of, 9
 - Suspension, readmission, and probation, 35

T

- Table of Contents, 2
- Teachers Education and Certification, Division of, 30
- Teacher-Education Practices and Standards
 - Faculty Committee on, 44
- Teaching
 - Malcolm Price Laboratory School, 143
 - Staff, 143
- Teaching Certificate and Endorsements, 30
- Teaching assistantships, 151
- Teaching English to Speakers of Other Languages (TESOL), 79
- Teaching Program
 - Additional requirements, 142
 - Approval, 44
 - Directed Experience, 44, 142
 - Student teaching, 30, 44, 142
- Technology
 - Graduate majors, 181
 - Undergraduate majors, 98
- Television Services (see: Radio and Television)
- Tests (see: Examinations)

- Tests and Interviews, 23
- Tests and Measurements, courses in, 78
- Test Scoring Analysis, 16
- Textbooks and supplies, 9
- Theatre/Drama, 13
- Thesis
 - Abstract, 154
 - Binding fee, 154
 - Filing of, 154
 - Selection of, 152
- Thesis and non-thesis plans, graduation requirements for, 153
- Tours, campus, 10
- Transcript of credits
 - Fees, 32
 - Filing, 23, 25
 - High school for admission, 23
 - Transfer students, 26
- Transfer credit, 26
- Transfer students
 - Curricular adjustments for, 26
 - Probation, 26
- Tuition (see: Fees)

U

- Unconditional admission, graduate, 152
- Unfinished (incomplete) work, 34, 153
 - (see also: Incomplete (unfinished) work; Research Continued)
- Union Policy Board, 14
- UNI Century*, 21
- UNI Student Association, 14
- University Calendar, 4
- University Facilities and Educational Services
 - Library, The University, 15
 - Maucker Union, 15
 - Commons, The, 15
 - Gallery of Art, 15
 - Museum, University, 15
 - Curriculum Laboratory, 15
 - Educational Media Center, 16
 - Academic Computing Services, 16
 - Educational Clinic, The, 17
 - Speech and Hearing Clinic, The, 17
 - Malcolm Price Laboratory School, 17
 - Educational Opportunity Programs, 17
 - University Center for Urban Education (UNI-CUE), 17
 - Ethnic Minorities Cultural and Educational Center
 - (Culture House), 18
 - Iowa Lakeside Laboratory, 18
 - Iowa Teachers Conservation Camp, 18
 - Study Abroad, 18
 - Foreign Student program, 14
 - Regents Universities Exchange Program, 19
 - National Student Exchange, 19
 - Individual Studies Program, 19
 - General Studies Program, 20
 - Advanced Placement Program, 20
 - College-Level Examination Program (CLEP), 20
 - Continuing Education and Special Programs, 20
 - Saturday and Evening Classes, 20
 - Conferences and Workshops, 21
 - Exhibits, 21
 - Broadcasting Services, 21
 - Public Information Services, Office of, 21
 - University Foundation, The, 22
 - University, Its Programs, 5

University of Iowa Nursing Program, 41
University Museum, 15
University office holidays, 31
University Policies, 23
University Student Alumni Association (USAA), 14
University Union (J.W. Maucker),
Staff, 188
Upper Elementary Teaching, 67
Urban Education, Center for (UNI-CUE), 17

V

Veterans

Administration program for, 31
Excused from required activity courses, 31
Residents, Iowa, 27
Vice-President and Provost, 185
Vice-President for Academic Affairs, Assistant, 185
Vice-President for Educational and Student Services, 185
Visitor (visiting classes),
(see: Audit)
Vocal music, 119
Vocational-Technical teaching, emphasis, 164

W

Waiver of regulations (graduate), 151
Withdrawal from a course (change of registration), 33
Withdrawal from the university
Procedure, 33
Refunds, 33
Women's Studies Minor, 147
Work (see: Employment)
Workloads, student
Undergraduate, 33
Graduate, 33
Workshops and Study Tours, 38
Work-Study Program, 11
Writing Competency Examination
Requirement for graduation, 29
Writing, Reading, and Speaking competency
requirements, 24, 29

Subject Areas

Alphabetic Order

12 Accounting
 18 Administrative Management
 99 Anthropology
 60 Art
 84 Biology
 89 Biology at Lakeside Laboratory
 17 Business Education
 86 Chemistry
 50 Communication and Theatre Arts
 51 Communicative Disorders
 81 Computer Science
 87 Earth Science
 92 Economics
 19 Education, Interdepartmental
 24 Educational Media
 20 Educational Psychology
 21 Elementary and Middle School/Junior High
 62 English Language and Literature
 72 French
 97 Geography
 74 German
 41 Health
 96 History
 31 Home Economics
 68 Humanities
 69 Humanities and Fine Arts, Interdepartmental
 00 Individual Studies
 33 Industrial Technology
 66 Journalism
 70 Languages
 35 Library Science
 63 Linguistics
 15 Management
 13 Marketing
 80 Mathematics
 25 Measurement and Research
 08 Military Science
 52 Music
 54 Music, Applied
 57 Music Education and Methods
 59 Music Literature
 53 Music, Organizations and Ensembles
 56 Music Techniques
 58 Music Theory
 65 Philosophy
 42 Physical Education
 88 Physics
 94 Political Science
 40 Psychology
 23 Reading
 43 Recreation
 64 Religion
 77 Russian
 30 Safety Education
 27 School Administration
 82 Science and Science Education
 14 Secretarial
 26 Social Foundations
 90 Social Science
 45 Social Work
 98 Sociology
 78 Spanish
 22 Special Education
 29 Student Personnel Services
 28 Teaching
 01 University, Interdisciplinary

Code Number Order

00 Individual Studies
 01 University, Interdisciplinary
 08 Military Science
 12 Accounting
 13 Marketing
 14 Secretarial
 15 Management
 17 Business Education
 18 Administrative Management
 19 Education, Interdepartmental
 20 Educational Psychology
 21 Elementary and Middle School/Junior High
 22 Special Education
 23 Reading
 24 Educational Media
 25 Measurement and Research
 26 Social Foundations
 27 Educational Administration
 28 Teaching
 29 Counseling
 30 Safety Education
 31 Home Economics
 33 Industrial Technology
 35 Library Sciences
 40 Psychology
 41 Health
 42 Physical Education
 43 Recreation
 45 Social Work
 50 Communication and Theatre Arts
 51 Communicative Disorders
 52 Music
 53 Music, Organizations and Ensembles
 54 Music, Applied
 56 Music Techniques
 57 Music Education and Methods
 58 Music Theory
 59 Music Literature
 60 Art
 62 English Language and Literature
 63 Linguistics
 64 Religion
 65 Philosophy
 66 Journalism
 68 Humanities
 69 Humanities and Fine Arts, Interdepartmental
 70 Languages
 72 French
 74 German
 77 Russian
 78 Spanish
 80 Mathematics
 81 Computer Science
 82 Science and Science Education
 84 Biology
 86 Chemistry
 87 Earth Science
 88 Physics
 89 Biology at Lakeside Laboratory
 90 Social Science
 92 Economics
 94 Political Science
 96 History
 97 Geography
 98 Sociology
 99 Anthropology

The University of Northern Iowa does not maintain a permanent mailing list for distribution of this Bulletin. Requests for copies should be addressed to the:

**Office of the Registrar
University of Northern Iowa
Cedar Falls, Iowa 50614**

This University of Northern Iowa BULLETIN is a general catalog of information regarding fees, curricula, and related policies and procedures. Every effort has been made to make the bulletin accurate as of the date of publication; however, all policies, procedures, fees and charges are subject to change at any time by appropriate action of the faculty, the university administration, or the State Board of Regents.